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"PRACTICE WITH THEORY AND SCIENCE!"

NUMBER 32.

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Agricultural.

PASTURES FOR MILK COWS

In the following remarks by a correspondent of the Indiana Farmer on this subject, dairymen may find a suggestion which is worth thinking about. There is one point which ought always to be remembered when the subject of pastures is being considered, and that is that a plentiful supply of good water is just as necessary as good grazing. Especially is this true in the case of dairy cows. Milk contains such pile. The spores may germinate and grow large increentage of water that any decrease in the amount drank by milk cows is at once followed by a corresponding decrease in the yield of milk. As water is much cheaper than milk, it will be seen how unwise is the dairyman who neglects to give his cows a full supply. The correspondent referred to says:

"It is very questionable economy which turns a good milk cow out into a pasture where she will be compelled to walk and pick the whole day long in order to secure a sufficient amount for food to satisfy her appetite. A pasture ought to imply some thing else besides a fenced enclosure, into which stock can be turned with a reasonable assurance that they will be kept there. If the pasture does not supply plenty of feed without compelling the stock to work hard to get it, a better plan and especially so with the milk cows, is to keep up and feed in the stables a feeding lot. It is certainly useless to expect that a cow will be able to give as good a flow of milk when she is compelled to tramp about all day, in order to satisfy her appetite, as she would if a supply of food were placed in easy reach, where she could satisfy her wants in a reasonable time, and then lie down and be

comfortable the rest of the time. "A good milk cow is not disposed to take a very great amount of exercise if she can well avoid it, and if she can secure plenty of feed and water and find a comfortable shade tree she will usually be very

"Of course every farmer understands that, from various causes, even the best of pastures will occasionally fail to supply as much feed as may be really necessary, and it will nearly always pay to be prepared at any time to supply extra feed when it may be needed and avoid compelling the cows especially to hunt too much for their feed. Grass is generally relied upon to feed the cows, and in fact nearly all the stock upon the farm, and in many respects it is the cheapest feed that can be secured, but it is important that there should be a full supply and that without compelling the stock to be

upon their feet all day to secure it. "Where anything like a full quota of stock is kept the safest plan is to always have some crop that, if necessary, can be used at any time when the supply of grass in the pastures ge's too low. Crops should be selected for this purpose which, if not used, can be saved and used profitably dur-

MR. R. S. Noddins, of Fenwick, Montcalm Co., writes under date of July 31: "Wheat is a very light crop through this part of the country-about the same as last year. The average will be from 10 to 15 bushels per acre. It has been very dry here and crops have suffered from that cause."

THE exports of corn from the United States for the twelve months ended June 30, 1888, were 24,558,157 bushels, against

CORN SMUT.

Treatment and Preventive Measures.

The Report of the Department of Agriculture for 1887 has quite a lengthy and interesting article upon "Smut in Indian Corn," and from it we take the following regarding the treatment of the disease and

preventive remedies:

It is as certain that corn smut can not originate spontaneously as that the corn itself must grow from seed. The destruction of the spores, then, means the reduction of the smut sooner or later; but co-operation over wide areas is necessary, since the atmosphere more easily than dust particles. Any remedy must be thoroughly tried before being condemned for apparent failure (one year is not sufficient), and every source of error must be guarded against. However remedy will probably be ineffective, because germinating in manure. It does not prove the spores germinate in the manure. Destructive treatment,-Cutting out

should be practiced intelligently and persistently, and farmers should co-operate. The smut should be cut out as early as possible, as soon as it gives the first evidence of crop in which the smut becomes evident long enough before maturity to make treatment effectual, or at least possible. As soon as the spores begin to break out they will be scattered far and wide over the whole field. Any ears that are partly smutted and are overlooked till the busking should not be thrown in with the rest of the corn, for and if in large quantities will injure the cattle eating them. If any smutty stalks are standing when the corn is cut they should ily swallowed by cattle with the rest of the tacking the flowers of the tassels. corn, and are liable to produce disease and death. A correspondent of the Country Gentleman, September 12, 1878, reports the loss of several head of cattle and sheep from this cause. Diseased parts cut out should be completely destroyed, not thrown upon the ground nor into a manure or compost for an indefinite period, as already shown, and when the manure is applied to the field they will be ready to seize upon young corn and penetrate its tissues. One writer suggests feeding to pigs, but this should never be done, for if the smut does not injure the pigs the spores will pass through the intes-

Farmers will urge that they can not afford the time or money necessary to cut out the smut. In answer to this objection Professor Bessey makes the following estimate:

"A 40 acre field should produce at least \$800 worth of corn. There is rarely less than one smutty ear to one square rod. This amount would be two per cent of the crop and would be worth \$16. Each additional smutty ear per square rod destroys \$16 worth of corn in the field. Will it not pay to save annually a loss of two per cent, and soil and destroying upward, and occasionally a loss 15 to 25 per cent, \$120 to \$200, for a field of this

Selection of seed.-Much may be gained by selecting for seed the largest and most farmer as butchering meat. In the history perfectly developed grains. Experiments of mankind it has played the most imporhave shown this will insure a larger yield, tant part of his necessities, giving wool, and it is also true (?) that corn from such hides, milk and butter. If all of the indusseed is less liable to smut. Weak plants tries of these States were put to the test of can offer less resistance to the attack of the survival or destruction, the sheep would fungus, as a weak man can less effectively resist disease. Thrifty plants can better withstand the smut if it gains entrance, and are more likely to escape its entrance, be- but of the infusion of the excretions of the cause they more quickly pass the stage at | intestines into the circulation, which taints which the smut is known to enter them.

fungus is entirely within the tissues of the host until after the damage is done.

Various applications have been tried to destroy spores adhering to grains. They have been made for this purpose to wheat, and there is no apparent reason why a remedy would not be as effectual in one case as before killing, giving water, however, the other. It seems to be generally agreed plentifully. This empties the stomach and that lime water is not effective. A weak solution (% per cent) of sulphuric acid is recommended for corn by some German ex-

Copper sulphate (blue vitriol) has been most used and with good results. One experimenter with copper sulphate for corn | quarters to save time, then hung up and the smut records that no perceptible benefic was skinning rapidly completed and the whole gained. If he fertilized the field with manure in any way infected by smut spores, then perfectly sweet, and no "wool taste" which is not unlikely, it would be a suffi- is perceptible. As the wool grows from the method of application which prevails in as the outer bark of the tree, no circulation Europe differs from the American method. I returns from the ends of the wool, and how The former is fully described by Sorauer in them can its length affect the mutton? But his work on plant diseases. He recommends as the wool has been and continues on the a weak solution and long soaking; a 1/2 per sheep before and after birth, what absurdity cent solution of sulphate of copper and six- is it to cut the wool off a short time before teen hours soaking he considers best. The killing! If the sheep is butchered rightly solution should cover the corn deeply enough | you may safely wrap the carcass in the so that none shall be exposed when the lat- wool and lay it by till used. ter swells, and the mass should be stirred

Sorauer states that a one per cent solution kills four per cent of the seed in twelve to and dressed at once are very different from 40,519,499 bushels for the previous year. sixteen hours. After soaking, the grain is the game of the shops of the cities, where Southern Europe is exporting more corn spread out on a flat surface to dry, and it they reach a "high flavor," the flavor which

enough for hand sowing in a few hours and for the drill in twenty-four hours.

The practice in America is quite different. Strong solutions are used and the grain is immersed only a short time.

All other preventive measures will be likely to be of little avail if the manure put upon the hand is contaminated with smut spores from smutty corn fed to stock, or smutty stalks thrown into the manure pile, or from whatever source.

Brefeld's investigations show how ma nure may spread infection. A direct demonstration of this point by Mo rini is quoted by Sorauer. Bran with spores are light and may be carried in the which corn smut spores were mixed was fed to a cow. The dung in which the spores were found germinating was put upon a piece of land with corn seed. The resulting growth of corn was, as a whole, smutty. Of thirty others dampened with carefully the smut is cut out and burned, if gum water and covered with ungerminated manure with which is intermixed smut of spores only four plants were smutty. This previous years is applied to the land the shows the injury that may come from spores that passing through the animal makes them more active. In Brefeld's experiments, on the contrary, nearly all spores sown in a nutritive solution in the spring germinated within twenty-four hours. It shows that every precaution should be taken its presence by the swellings it produces to keep the smut away from stock and out and before any of the spores burst through of manure piles. Burying the smut deeply the epidermis. Corn is probably the only suggests itself as a convenient and efficient means of disposing of it. Burning is effective, but care must be taken that spores shall not be carried away and scattered by currents of air about the fire. Rotation of crops should be practiced for evident rea-

In Europe two other species of smut occur in corn and both are most prevalent in Italy. two reasons: They will scatter their spores, Ustilago Fischeri, Pass., attacks the cob, and in Italy, especially about Parma, "sometimes destroys about half the crop.

Ustilago Reliana was introduced into not be cut with the rest, but kept separate Italy on sorghum from Egypt, and in the and destroyed. Masses of smut are greed- former country it grows also on corn. at-

THE "WOOL TASTE" IN MUT-TON.

Hon. Cassius M. Clay, of Kentucky, in a letter to the N. Y. Tribune, calls attention to the fact that a circular from the "American Public Health Association" contains a recommendation of a method for the pre vention of the "wool taste" in mutton which is fallacious. The recommendation. which has been published time and again, was as follows:

"In dressing a mutton the woolly coat should not be allowed to touch the flesh. tines without injury to themselves and infect There is quite a perceptible difference in the wether which has been for some time deprived of all access in his woolly coat, and of that taken from a sheep which has heavy

Mr. Clay then proceeds to give his experience in dressing mutton, the reason for the frequent presence of this "wool taste," and the method he has successfully followed to keep his mutton free from it. What he

"Of all the methods of improving the soil and destroying weeds sheep are the best. Of all domestic meats mutton is the most wholesome, being a specific for many diseases. It is the most convenient to the remain as the first factor in civilization.

"The 'wool taste' then comes not of the wool or the length of the wool on the sheep, the flesh with the offensive 'wool taste.' Application of remedies.-Any outward | The lining strata of the intestines prevent application to the growing corn would be the offensive entrance of the excreta into useless if it could be made, because the the capillary tubes of the absorbing surfaces, But so soon as the vital powers cease this capacity of resistance ceases and the unpurified excretions are infused into the venous circulation.

> "In consequence of these facts, it is bes to starve the sheep for twenty-four hours bowels of the sheep and diminishes the tendency of infusion. The sheep, all things being ready, should have the throat cut all round to the bone, thus bleeding it freely. As soon as the sensibility of the victim is lost, it should be skinned partly on the hind entrails at once taken out. The flesh is

"Among all the hunters of my circle in early life we were accustomed to take out the intestines of the squirrels and hares as soon as shot, before cooling. Birds killed should be sown soon afterwards. It is dry delights the dog from his half-decayed about the time named the Norfolk half-bred largely imitated. The London market may dry winds have prevailed for a number of

buried meat. De gustibus non disputandem est. So the Pontic monarchs fed on poison and lived. Save us from the doctors, the demagogues and the dogs?"

WOOL IN GREAT BRITAIN.

The following interesting facts regarding the wool-growing industry in Great Britain is taken from an article prepared by Mr. John W. Turner, of Bradford, England, and published by the Journal of the Royal Agricultural Society:

As a contribution toward a better knowledge of the subject, Mr. Turner briefly describes British wool and its uses, before proceeding to discuss its commercial aspects The long-wools (Lincoln, Cotswold and Leicester), he tells us, are subdivided for commercial purposes into lustre and demilustre. The pure lustre wools were formerly made chiely into ladies' dress goods, and twenty years ago commanded a much higher price in proportion to other goods than they do now. Lustre or prightness alone, which entered so largely into the enhancement of the value of these wools for dress purposes, is now of secondary importance. It is however, still necessary that they should be smooth and straight, and any crossing with rougher breeds for the purpose of obtaining weight, or with broken breeds for the sake of the mutton, reduces their value. Mr. Turner speaks of the unconquerable difficulty of sometimes making the woolgrower understand this point, in connection with the fact that in lustre, as in other wools, the finer the fibre the more valuable is the wool. Hearing that fine wools are the best to sell, the long-wool grower in many cases tries to improve his wool by crossing it with the Down; the result generally being that he loses the lustre and smooth straight hair without obtaining enough of the fineness of the Down to be of any commercial value. This, of course, is not directed against the crossing of breeds, but merely against the erroneous notion that the fineness of wool of one breed can be grafted into another without altering its original characteristics. A colonial farmer under such circumstances as those of the long-wool grower would, Mr. Turner points out, have preserved the

tinued it by a careful selection of the finest wooled among his sheep. The demi-lustre wools are made into camlets for men's clothing in China, Japan and northern Asia; into lastings for boots and furniture; and into bunting for flags, and some kinds of curtain stuffs. The value of this class of wool consists in its length, strength and solidity of fibre. Fineness of hair is valuable so long as it is obtained in the right way, but this must be done by selection within the family itself, and not by crossing from the outside. These wools are used for classes of dress goods where a certain "handle" is required, and any interference with the breed re-

character of his breed, but would have con-

In Down wools, on the other hand. which are principally used for hosiery, under-garments, flannels and similar goods, also for some woolen goods where a springy light handle is desired, absence of lustre, the finest possible fibre, and not too much length, are the desirable qualities. In Mr. Turner's opinion, there will always be by comparison a good demand for pure bred Down wools, because they possess qualities which render them suitable for the uses just mentioned in greater perfection than any other wool. But, as already stated, crossing deprives the breed of its best qualities, from the wool-buyer's point of view. An illustration is given by Mr. Turner of a clip of wool from a Hampshire Down flock, which had been improved by crossing with the very heaviest Lincoln. All the good qualities in the two breeds were effectually destroyed. No lustre manufacturer would use the wool, as the lustre has disappeared. No maker of buntings or similar goods could use it, as the staple was too short; whilst for the hosiery trade it was both too long and too coarse. The lot was ultimately sold at about 50 per cent. less than the value of Down, and 25

Half-bred wool occupies, as far as supply goes, the most important position in the market. It is the largest item in the English clip. It is an ever-increasing quantity in the Colonial clip, and probably of the forty million of sheep in America the greatthe name "half-bred" throughout in the same sense as it is generally used in Yorkshire, to signify a cross between a coarse and a fine-wooled sheep. What is required

wool-growers got dissatisfied with the soon count upon a greater supply of clean days, and corn is shriveling up under their weight of their fleeces, and carried away, and fine roll French butter, tastefully made influence. No rain has fallen since June no doubt, by the high prices which the up and moderately colored. Models of that | 22 in some sections of the State. The neighboring farmers of Lincolnshire could make of their much heavier wool, they began to take means for increasing the weight of the fleece. The only thing aimed at appeared to be weight, and very little thought was given to the effect upon the character of the wool. The result has been that the Norfolk half-bred of to-day is a mongrel it competes with. The same mistake has been made in other districts, and has been one of the causes of the downward tendency

of prices. Turner includes all wools which have in glass. If artificial, the butter will remain as them a cross of the Scotch black-faced. more or less recent, and in various degrees Throughout the north there are various wools which show all kinds of mixtures The value of these broken-bred wools is now somewhat higher in proportion to other drinks. The idea to give it to foals of ment and always feel at home there, wools than it formerly was, a good many of heavy races of horses, after being heated whether bothering the busy office force with them being utilized in the manufacture of and mixed with prepared linseed, does not our sage remarks, or wandering around in so-called homespuns, cheviots and tweeds meet with favor. An agriculturalist in the the vast acreage which constitutes the

of the rougher class. clip. In 1861, the total import of wool of to 615,000,000. More than 300,000,000 lbs. of farmer and the baker are doing well. can be matched and beaten in the London sales of Colonial wool. And while all this animal 1% oz. of carbonate of lime or soda, has been taking place, our own wool in the or 17 oz. of ordinary vinegar daily, and feed classes which compete with Colonial has well. The dairy and its vessels should be been deteriorating.

The mode of business between wool-grow ers and wool-users is next adverted to, and Mr. Turner's strictures on this part of the home trade are only too well merited. There are many points about the manner in | To the Editor of the Michigan Farmer. vantage over our own. The flocks are often it can be taken direct to the comber without | for a rainy day. any sorting whatever. As the sales generthere are seldom less than 100,000 bales offered every night there is plenty of choice. When this style of business is compared with the dilatory and unbusiness-like manner of buying English wool from the farmof time and trouble there is to the user of business (over 13 years). Colonial wool as compared with the user of

buy in the country. enable our farmers to get more for their wool, or even something like old time prices, Mr. Turner can only reply that at present he sees very little hope of any substantial raise in prices. An import of more than 600,000,000 of pounds of wool is a factor clusive conditions which formerly helped to mills, yet we have to compete with the other ers generally take care that their wool is and even then we will miss. got up for market better than it often is."

DAIRY NOTES FROM FRANCE.

Paris, July 1st, 1888. In order to bring home to dairy farmers the important resolutions recently adopted er number are half-breds. Mr. Turner uses in butter and cheese making, the French government intends to delegate ambulatory experts to dairy districts, provided with the latest implements for separating the milk. so as to ensure the least loss of butter-fat. cient reason to explain the failure. The surface of the skin and is pushed forward in this class of wool is a moderate length of and by rapidly creaming, have the skimmed staple, softness of handle, and the greatest milk sweet for cheese making. The old fineness that can be obtained. As there is plan of placing the new milk in shallow the keenest competition in this class, it pans and there leaving it for 30 or 48 hours follows that the greatest amount of know- to throw up the cream, has become antiquatedge on the part of the British farmer is ed. By means of the Centrifugal apparatus, ecessary to hold his own in the contests. | the cream can now be extracted as it comes Yet Mr. Turner is able to show that the fresh from the cow. A manufacturer undergrowers of half-bred wool in this country takes to supply the necessary modern dairy have for the last quarter of a century or so apparatus to these farmers whom the experts been steadily playing into the hands of the certify as qualified, taking payment by easy Colonists. Twenty-five years ago some of installments. Another point will be forced our half-bred wools were celebrated, and on to the attention of farmers, that of makjustly so, for their fineness and softness, ing the foreign cheese so largely imported. and they were very much sought after for Soft cheese must always be a local out-put. certain classes of goods. This was notably But Gloucester, Cheddar, Dutch and Gortrue of the Norfolk half-bred wool. But gonzola "brands," can be, and are being

sent out by English makers are being sent over to Normand dairies.

Messra. Van Lookeren and Gerlings have discovered a plan for at once detecting the difference between natural and artificial butters. Boil a little pure or distilled water the suspected butter in a coffee-spoon over breed, which is beaten by almost every sort a candle flame; pour some of the boiling water into a watch glass, and simultaneously drop the hot melted butter. If natural, the butter will spread into a thin layer: Under the head of " mixed breeds." Mr. of small grains and float to the edge of the a layer of grease, with large beads or granules swimming therein. Skimmed milk is extensively used for rearing calves and fattening pigs. In Hamburg cart and old horses are supplied with such milk as department of Isere, could not find any workshops, noting the additions, improve-Mr. Turner shows very conclusively that market for his skimmed milk. He consult- ments and new things generally. A disimported wool is a great and important fac- ed a baker, and they agreed to employ it in tinguished United States Senator in a tor in determining the value of our home bread making; the milk is creamed immediately when taken from the cow, and all kinds into this country was, in round then sent to the baker in a sweet condition. figures, 150,000,000 of pounds, or about an In this state it does not prevent the dough equal quantity to our own production. In from rising. The public taste has been hit 1886, our own production had fallen 186,- by the appetizing flavor of the loaf, and 000,000, while the imports had increased above all, by its attractive whiteness, so the

this enormous increase is the produce of Frequently after the milk has been pure lustre wool, every kind of British wool found, administer some exciting medicine, as gentian or caraway seed; others give the well scoured and disinfected.

NOTES FROM INCHAM COUNTY.

HOLT. July 26, 1888.

which Colonial wool is sent to market and To-day has been a day long wished for dealt with, which gives it an enormous ad- by the farming community. Rain commenced falling in the night and continued very large, and after being shorn, the wool nearly all day, assuring, as we hope, a good is generally thoroughly skirted, and also corn and potato crop. Your correspondent classed into different descriptions, so that secured the last load of wheat bundles yeson its arrival in London large quantities of terday afternoon, and so was a good shape

Wheat barvest has progressed rather slowly ally last from three to six weeks, and as this year, owing to a tendency among farmers to do their work without hiring much help. The low price of wool and other commodities has had a dampening effect, and wages have fallen, good men offering to work for one dollar per day, a thing which er, it will be seen what an immense saving I have not known since I have been in

I have been much interested in A. C. G's British. A manufacturer can, and often statement about the 20-acre summer fallow does, purchase as much wool in London in and think his theory right. My praca single night as would take him a month to tice has been to plow, summer I fallow just before haying, and harrow and roll as vate with two horse cultivator, harrow and very similar to volume thirty-two in size, crops. But last year was an exception; I and binding. The pedigrees include all re--the ground being so hard as to require records of the Association are now-close up. three horses and a new point per day-and | This volume contains the pedigrees of 5,856 which effectively removes any of the ex- treated the remainder of the season the bulls, running from No. 84235 to No. 90091, in no other way than that the hot sun and the farms of the country. Since March, half in the shape of manufactured goods of drouth burned the soil. I believe it would 1884, eight large volumes of this work have the world. Thus the question is not how I do not, however, lay this down as a fixed pedigrees as this last one, or about 120,000. position, for that is impossible, but how it | ble field (15 acres) just after harvest. The has to hold its own in the competition. Mr. ground was dry and hard, requiring a three- cally thoroughbreds, which are not recorded, there in all its ancient purity; and let farm- wind and weather, and conditions of soil,

> THE Island of Jersey is not a very large one, but it is blessed with a very productive soil and a genial climate. Its agriculturists are, or should be, happy, for their returns average higher than any others in the world. The average return of crops in the Island is nearly £53 per acre—say between \$250 and \$260. According to London Truth there are 6,335 acres under potatoes which last year produced £455,891. Tomatoes to the value of £8,000 were grown and nearly £3,000 worth of pears, although the fruit season was a very bad one. One hundred and twelve tons of grapes were despatched to the London market, which sold for £18,000. The great specialty of Jersey cultivation is now the production of early potatoes, the growing of which is costly, averaging nearly £45 per acre. As much as £24 per ton has been obtained for these potatoes at the opening of the season. One hundred and eighty-three acres are exclusively devoted to fruit, and 175 acres to salads and vegetables.

AND now the telegraph brings news of and Western Kansas by drought and the fit for seed, also the price of same per buprevalence of extremely hot weather. Hot, delivered on board of cars.

promise of the crop heretofore was excellent

A GREAT AMERICAN INDUSTRY.

Home is not a bad place in these hot days of midsummer, but one cannot always stay in a clean yessel; melt less than a pea of at home, nor is it desirable for many reasons, so we like all the rest take an occasional trip for business and pleasure combined. Recently we found ourselves in "Hoosierdom" at South Bend, the great workshop of the State, and although not then it will rapidly separate into hundreds our first or second visit by any means, we found just as much to interest us as ever-We cannot speak of all the industries of that thriving, growing manufacturing city which are many and varied, but must content ourselves with a reference to one of the largest-the Oliver Chilled Plow Works. We like to visit this immense establish speech not so very long since spoke of the Oliver Chilled plow as "an agent of civilization," and when we think of the large number of these plows going to almost all parts of the globe, we are quite ready to agree with him. Passing through the shipping warehouse, we saw plows being prepared for shipment to Great Britain, Mexico, South America, Australia and other Australasia. During the whole of the pe- brought to the dairy, it undergoes an altera- foreign countries, to say nothing of those riod the Colonial wool has been steadily im- tion, becomes "blue," M. Mosselman, of destined for the United States, and we conproving. Everything that attention and the Cureghen Veterinary School, states this cluded that the whole country had a right to business ability can accomplish is done by change is caused by microscopic germs, and be proud of this great American enterprise. the Colonials to meet the want of the trade. is generally due to sickness with some of The works have grown wonderfully, and the The result is that, with the exception of the cows. When the affected animal is addition this year of a new wood-working shop 100x250 feet in size does not make them look any smaller. Of course the readers of the FARMER know all about the Oliver Chilled plow: for Michigan farmers are progressive and the best is none too good for them. Among the many new things to which our attention was called was "Oliver's Patent Slip Nose Share" and slip point, which is a great improvement in the way of a saving device) and already very popular. Users of the Oliver plows are assured that this share and point can be used on their old plows which have done such faithful service, and they will benefit. Progress seems to be the word at this, the largest plow works in the world, and every department of the works shows it-Mr. James Oliver, the founder and presi dent, is at present in Europe taking a well earned vacation, but will be back early in September to resume his active duties. Visitors are given a courteous welcome and shown through the works in a manner that leaves only pleasant impressions, and our readers who visit South Bend should not

THE AMERICAN SHORTHORN

The thirty-third volume of this important work has just been received through the To the inquiry as to what can be done to soon as possible; after harvest would culti-courtesy of Secretary J. H. Pickrell. It is drill. In this way have raised my best and got up in the same style of printing plowed 35 acres just before having as usual ceived up to January 20, 1888, so that the same as usual. I was disappointed, how- and 9,361 cows, a total of 15,217. This keep up the price of British wool. For ever, my oat stubble being the best of the will serve to show the wonderful growth of though it must be admitted that we do not two from the time it come up until harvest- Shorthorn breeding in America, and the exretain quite half of it for the use of our ed, and I, like A. C. G., can account for it tent to which improved cattle are kept upon France and Germany in all the markets of have paid big to have plowed a second time. been issued, each containing nearly as many home-grown wool can be restored to its old rule. Nine years ago I plowed a hay stub- Besides these there are a large number of Shorthorns in the hands of farmers, practi-Turner's answer to this is: "Let the wool horse team. This field gave only a half a and thousands which contain a greater or which is known to suit a district be grown crop. We farmers have to study both the less admixture of Shorthorn blood through the use of thoroughbred sires. When to this are added the other improved breeds,-Herefords, Polled Angus, Galloways, Jerseys, Holstein-Friesiars, Devons and Ayrshires, it will be seen what a wonderful advance in the breeding of good cattle has taken place within the past twenty years. With twenty years more of like progres; the scrub will have become a thing of the past. In numbers the Shorthorns keep the lead they have always had in this country, the other improved breeds displacing the scrub rather than the Shorthorn.

This volume is free to members, but they nust pay express charges. To non-members the price is \$3, the lowest price at which a volume of this work was ever issued. Secretary Pickrell has arranged with the express companies to carry these volumes at 25 cents per copy, but to get this rate the charges must be paid in adwance. Remember this when you are ordering a copy and include express charges.

Cannot Tell Where it Can be Had,

JACKSON, July 97, 1888.

To the Editor of the Michigan Farmer Can you inform me where I can purchase 25 bushels of Red Mediterranean erious damage to the corn crop of Central wheat of the bearded variety, a pure article

CARRIAGE & HARNESS MANUFACTURING CO.

HARNESS

W. B. PRATT, Secretary,

NEW ADVERTISEMENTS.

\$100

NEW ADVERTISEMENTS.

close of the New York Exhibition last

December, there was at least two hundred

sick birds. I am not saying this to throw

cold water upon this, or any other exhibi-

tion. I would rather encourage such shows

I have exhibited very many times, including

the last named, and I hope to do so again

but why should this hide the truth? People

should be thoroughly acquainted with the

constitution or any other vital points con-

nected with their stock, or anything else

NEW ADVERTISEMENTS.

Are Diamond Dyes. They excel all others

in Strength, Purity and Fastness. None others

are just as good. Beware of imitations. They

3

they are engaged in."

THE ONLY

Brilliant 4

Economical

Durable

Dates of Trotting Meetings in Michigan for 1888.

...Sept. 18 to 2

THE DETROIT MEETING.

The meeting, which opened under such back from the rains of Thursday and Friday, which compelled a postponement, to generation. the bitter disappointment of the members of the Driving Club, owners, and hundreds the meeting over until Saturday, and crowd | right. every race possible into that day. The consequence was a fine day's sport, and five well contested races.

The 2:27 race was first called, in which there were only two starters, Daireen, owned by C. F. Moulton, of Lexington, Ky., and Frank Buford, ewned by J. M. Johnson, of Nashville, Tenn. The mare Daireen was the favorite, and won in straight heats; time, 2:22, 2:213, and 2:24. The third heat was a sharp one, the mare only winning by a neck.

Next came the 2:30 pace, in which there were three starters-Budd Doble, Onie D., and Jack Curry. Budd Doble was the favorite in the betting, selling at \$50, the field for \$25. Budd was evidently held up cerned, both are founded upon the thoroughin the first threelheats, and then given his head, when he took the next three straight. The fastest time was, made in the last heat -2:201/4. The following is the summary:

2:30 PACE-PURSE, \$2,000. Budd Doble

The 2:40 trot called out five starters, namely, Red Light, owned by J. B. Shockency, Louisville, Ky.; Junemont, owned by John Carey, Jackson, Mich., Rajah, W. H. McCarthy, Lexington, Ky.; So Long, Steele & Chapin, Terre Haute, Ind.; and Lady Helen, W. T. Campbell, Dallas, Texas. In the pools Junemont was the favorite. In scoring for the first heat, ail the horses behaved badly, and some of them continued throughout the heat, Junemont and Red Light doing the best trotting. The former won easily in 2:35%.

For the next heat it required 18 attempts before the horses, got the word, and all the drivers were assessed \$5 each by President Campau. At the half mile pole Red Light was seen to falter, gradually slack up and stagger around, inally dropping to the ground. He was dead before the heat was over. Junemont was again the winner in 2:2436. He also captured the next heat and the race easily in 2:24. The following is the summary:

2:40 CLASS-PURSE \$2,000. Junemont... Lady Helen. So Long... Red Light -2:3514, 2:2414, 2:24.

The 2:24 trot had five entries, namely Company, J. H. Goldsmith, Washingtonville, N. Y.; Kit ; Curry, H. D. Kyger, Darrtown, O.; Earl McGregor, J. A. Graham, Biggsville, Ind.; Black Jack, Morgan P. Bull, Campbell Hall, N. Y.; Shamrock, W. H. McCarthy, Lexington, Ky. Mc-Gregor and Kit Curry were the favorites, selling about even. The start for the first heat was a bad one, McGregor on the dead run, and three lengths ahead, which he held to the first turn, when Kit Curry drew up on him, closely followed by Shamrock and Black Jack, the mare finally winning in 2:19%. The next heat was very similar. McGregor getting off first, Kit Curry closing up and beating him out in 2:20%. She also took the next heat and the race in 2:20. The summary is as follows:

2:24 CLASS-PURSE, \$2,000 Black Jack ompany.... Time-2:19%, 2:20%, 2:20.

You Bet, the pacer, was brought out, with running mate, to beat his record of 2:07, for a purse of \$500. After he had got started he paced the mile without a skip, making the circuit in 2:06.

The special race between W. J. Gordon's Guy and G. A. Singerly's Prince Wilkes, which had been arranged during the week, with a purse of \$3,000, was next called. The betting was \$25 to \$6 in favor of Wilkes. Guy was unsteady throughout, showing wonderful bursts of speed, but losing much ground through breaks. Wilkes was the winner, Guy taking the first and second heats. Time, 2:17%, 2:16%, 2:17%, 2:2414, 2:2014.

This closed the meeting, and it was nearly eight o'clock before the last heat was over.

FRENCH COACHERS.

pedigree.

To the Editor of the Michigan Farmer. I have been a good deal interested in Coach horses lately, and have sent to a number of dealers for catalogues, as I wanted to look into their pedigrees, for I am among those who attach a great deal of importance to a

Among the French Coachers, 1 expected to find French blood only, but am surprised to see that the names are most, if quite not all, English. However, I was glad of this, as I thought it would give me an opportunity to examine the pedigrees in the English Stud Book. But when I commenced my trouble began. Would you be kind enough to give me a little assistance; perhaps I have such poor success because 1 am not used to the business.

Here is an example of what I mean: A certain horse has the following pedigree; it will be seen that his progenitors are all English, although he himself is called

French: Sired by government stallion Vidi; dar Lisette, by Giorieux, Vidi by Quiclet, out of a daughter of Inkerman; he by Jericho, out of a daughter of Ai; he by Young Rattler,

Jericho by Byron, out of a daughter of oltaire; he by Imperieux out of a daughter of Pilot; he by Octavius (English thorough Imperieux, by Young Rattler, out of

ntaire, he by Eclipse (Engthoroughbred). Young Rattler, he by Rattler out of Biron by Captain Candid, out of Helene.

by Eastham; he by Sir Oliver, out of Cow-

slip by Alexander.
Captain Candid by Cerberus, out of Mondane, by Pot-8-os. This is as far as I need go to illustrate the

the difficulty, which is right here: Eclipse, I see by the Stud Book, lived 88 years ago, and Pot-8-os 111 years ago; yet they are said to be progenitors of Forester, foaled in 1883; there are about three generations between him and Eclipse, and about six generations to Pot-8-os. This great length of time can be accounted for only by supposing that horses of former days lived longer than ours do now. But an instance of still greater longevity is noticed in the case of favorable auspices, experienced a bad set Rattler, whose name occurs in the second generation, and again in the fifteenth

It may be that the Frenchmen have made a mistake when they undertake to handle of visitors who had come into the city from | English names, but if this is so, we cannot the interior. It was finally decided to hold tell what they have succeeded in getting

The pedigree given above is a wonderful compound of nonsense. There is neither head nor tail to it, and the rapid manner in which it gets back to those noted English thoroughbreds, Eclipse'and Pot-8-os, is one of the singular points in it. There is no doubt in our mind that the French Coacher, as he is termed, is largely of English thoroughbred blood. The thoroughbred is the horse which is always depended upon to produce a class of horses of the finest proportions, the most graceful form, and that style and elegance wanted where the horse is to be used for such purposes as are the French Coacher and the English Cleveland Bay. So far as these two breeds are conbred. Such a pedigree as the one referred to by our correspondent is simply a humbug. The easy manner in which the horse traces back a hundred years to noted English racers, and the fact that the breeding rests entirely upon the say-so of the man who bred him in France, and tradition-there being no stud-book for the breed-makes the wild statements indulged in simply ridiculous. Understand this, however, these Coachers may prove excellent sires; they are elegant looking horses and show good breeding in every line, but it is the thoroughbred to which they are indebted for the characteristics which make them valuable. But as to accepting such pedigrees as this one we must be excused; and thoroughbred, and especially of the several horses referred to in the above pedigree. will laugh at the crudeness and lack of knowledge evinced by the party who is responsible for it.]

Another Good One from Masterlode,

Dunton's Spirit of the Turf has the following notice of Plush, by Masterlode, who is said to be able to beat 2:20:

this season, and calls up several old incidents upon the turf. The dam of Plush is Velveteen 2:26, and her dam was the dam of Patchen, sire of the chestnut gelding of that name, record 2:18%. A good many years ago when Harvey Clark had the noted trotter Sleepy John, his father-in-law, Mr. Spees, owned a filly which he sent to Mr. Clark to have trained. Her toes were long off, and when started up she went just like he had a trotter right away. But after her hoofs were pared off, and her toes shortened, she couldn't go a bit. It is too long a story relate here, but it was at last discovered that the filly that was afterwards named Velveteen, and made a record of 2:26, was put to breeding; and now her daughter Plush trots a first heat in 2:23, and a fourth in 2:24%, and her limit of speed has not yet been reached. She, like Flossie G., is another feather in the cap of "thoroughbred blood in trottera." Mr. John Spees, of Winthrop, Iowa, owned the colt Patchen, neary or quite thoroughbred; he also owned a filly by the imported horse King of Cymry; dam by the thoroughbred horse Joe Printer. This colt and filly were coupled and the produce was the mare Velveteen. Velveteen was bred to Masterlode and the produce is Piush, who can beat 2:20."

Common Sense Breeding.

"Common Sense in Horse Breeding" was the subject of a paper by Mr. James Wood, of Mount Kiseo, at the Syracuse Farmers' Institute. He spoke of the horses raised in New York as being better than those raised on the prairies of the west, as they have better feet and more endurance. Over 4,000 die in New York City every year and as many more are used up and sent to the ountry. Cars will soon be propelled by electricity, but the better class of horses will always be in demand. After speaking at some length upon the superior methods of the American trotting horse and the good that had resulted from his breeding, he told the story of the young farmer training his promising colt. After spending \$500 or more for sulky, shoeing, care, etc., to say nothing about loss to the farm and moral effects on the boy, the four or five-year-old colt would often have to be sold for from \$150 to \$400—nominal price \$1,500. Why s it that a man, otherwise honest, can't tell the truth about a horse? The demand for trotting horses is limited. The raising of coachers is attended with some risk; but a good draft horse can always be sold for his value. Soundness of feet, levelness of head, rapidity of walk are to be preferred in a

draft horse, regardless of breed. The mare should be as nearly as possible what we want the colt to be. The stallion should be somewhat closer built than the mare. "Short back and long belly" is a

good old rule. "I prefer fall foals. They may suck the mare in the winter and be weaned on grass in the spring. Colts should be early taught to eat bran and oats and should be fed twice each day. Corn meal should never be fed them. Keep the colt growing. It takes longer and costs more to make up for a pound of loss than it does to add five pounds of gain under favorable conditions Groom the colts every day with a common stable broom, and thus accustom them to be handled. My colts, naturally high strung, will stand and not be alarmed if almos anything be banged about their heels Every colt should be broken to the saddle Some time in his life some one will want to ride him. Drive in deep snow to secure proper walking gait."

Horse Gossip.

THE famous pacing mare Buffalo Girl 2:12%. has foaled a bay colt by Jerome Eddy 2:16%. at the Jewett Farm. W. B. McDonald, who owns the colt, has named him Eddy Mac.

THE horse Red Light, which dropped on the Detroit track in the 2:40 trot, was valued by his owner at \$10,000. Heart disease was the cause of his death. He was entered through the Grand Circuit.

AZMOOR, which won the race at Petaluma, Cal., on the 4th inst., in 2:28%, 2:24%, 2:25%, is the sixth of Electioneer's get to enter the 2:30 list this season. His dam is Mamie C., horoughbred daughter of imported Heroules

Houses are rather uncertain property to nvest in. Some time ago Fred Groves, of East Saginaw, paid Isaac Bearinger \$500 for Whitebird, a promising trotting mare. This week the animal died of inflammation of the

In the Excelsior Stakes at Saratoga, N. Y., on Tuesday last, Kingston won easily against Terra Cotta and Eikwood. The distance was a mile and a quarter, and the time 2:1034. The Chicago Stable, which owns Terra Cotta, is said to have lost \$3,000 on him.

AT Cleveland, in the free-fer-all pace, Arroy on in straight heats, the time being 2:15%, 2:14% and 2:13%. Mike Wilkes was distanced in the first heat, Jewett was second and Gossip Jr. third. Eight horses started. It is clear that Arrow out-classes all the pacers now on the turf except Johnston.

THE telegraph dispatches announce that match race for \$2,000 between Belle Hamlin and Clingstone has been arranged to take place during the Grand Circuit races at Bufalo. These big matches, however, generally end in a failure, the race never coming off. They are frequently resorted to as an advertising dodge.

THE Michigan horse Junemont, who has een one of the sensations of the season, was entered in the 2:20 class at Cleveland, but the nace was too fast for him. He got fourth veteran, Deck Wright, being last. The time reported was 2:181/4, 2:198/4, 2:20, 2:203/4. overnor Hill was the winner.

In reply to an inquiry by a correspondent, ve reply that the fastest mile ever run in America was by Ten Brock, at Lexington, Ky., May 24, 1887. The official time was 1:3934. any one posted in the history of the English | The English do not report the time in their races, so that the time made by Flying Childers, Saunterer and English Eclipse is un- graph. known. The figures you give are merely estimates.

THE Cleveland meeting of the Grand Trotting Circuit opened on Monday. The classes were well filled, and many new horses wer among the contestants in the slower classes Budd Doble, the horse which won the 2:25 pace in Detroit, was nowhere at Cleveland The winner in that class was Bessemer, brown stallion, who took the race in straight "Plush seems to be pretty good goods heats; time, 2:18, 2:1614, 2:15. There were 11

THE sale at auction of the famous young trotting stallion Bell Boy, was one of the events of the present week. The sale was held at Lexington, Ky., on Tuesday last, and was attended by horsemen from all parts of the country. Mr. J. C. Clark, of Elmira, N. Y. started the sale with a bid of \$20,000, and was followed by Mr. C. C. Seaman, of San Diego, as any colts are which have not been pared | California, with one of \$21,000. These two were the only bidders, and when \$49,100 was a trotter, and so fast that Clark thought bid Mr. Clark quit. Mr. Seaman bid \$50,000. which is one of the highest prices ever paid for a horse in the world. It will be remembered that Bell Boy was sold by S. A. Browne & Co., of Kalamazoo, for \$30,000. The pur chasers made a good thing, as they get as advance of \$20,000 for keeping the horse a

> THE method of handling and developing youngsters on Senator Stanford's famous Palo Alto ranch, as described by an exchange.

is as follows: "The foal is weaped at five months. The he is broken for the halter and turned into the field, sheltered at night, and fed twice day on boiled and ground food, all he can ear This is continued until eight months old, and then they begin to work him on one of the miniature tracks. He is kept at this until he twelve or thirteen months old, and the roken to skeleton wagon alongside an old orse. Those that it seems desirable to keep on training are continued in exercise; the others are turned out to pasture. In the training the ordinary rule for all ages is short distances, brushes and work every day. Good colts are entered almost everywhere. and when the time approaches they are tried for long distances. Speed and the possibili-ties are developed without using up all the reserve power. The colts and fillies run to ether until they are seven or eight months ld; after that they are kept apart. When they are weaned two colts or two filles are put in one stail until they are from eleven to hirteen months old; then they get separate

The correct way is to buy goods from the nanufacturer when possible. The Elkhart Carriage and Harness Co., of Eikhart, Indiana, nave no agents. They make first-class goods, ship anywhere, privilege to examine. See

Che Farm.

Superphosphate on Wheat.

W. I. Chamberlain, in the Country Genleman, says: My wheat is a marvel to me. ast fall the weather, at seeding time, was very dry, and wheat got a bad start; the winter and spring were severe, and there will be, in the opinion of the best judges not over 55 or 60 per cent. of a full crop in Ohio. The field on which I sowed 25 acres was chiefly an old half-barren pasture, that l have been slowly reclaiming and bringing up for eight years or more. Part of it slopes toward the west, and is exposed to all the wintry blasts. There, in spite of superphosphate, there is a little wheat-not over eight or ten bushels per acre. Most of the field slopes easterly, and is protected by barn-yards, forest and orchard from westerly and northerly winds. Here the wheat is excellent, some parts looking like 30 or 40 bushels per acre. But I had a drill's width in two parts of the field sown clear through without superphosphate. These strips have almost no wheat at all, and right beside them, on each side, is rank, strong wheat that, in the protected parts, will yield 30 or 40 bushels per acre. I am not in the habit of making extravagant statements. and certainly have no object in booming commercial fertilizers, but I think it within ounds to say that this year, on that land superphosphate I used will bring 100 bushels truck, where is the profit? Then suppose wheat above what I should have got the same value in products is raised on rye

without it. I used three and one-half tons-300 pounds per acre.

After several careful trials I find that a good superphosphate does my wheat on one case and the misfortune of a piece of clayey soil more good than pure bone meal, ton for ton. But used high grade ammoniated goods, a brand that for eight years able crop to follow after rye I consider to has got a high analysis from our Ohio State be sweet corn drilled for fodder, since this chemist. It is the Forest City brand, made by the Cleveland Dryer Company. Other brands, by other makers, are good, but no one should buy except on guaranteed analysis, and comparison of valuations, as made out by his State chemist or inspector of fertilizers.

An Unexpected Result. Farmers not infrequently meet with results that are of such a nature as to cause not only disappointment but great mortification. We have recently marked a case of this kind when a fine field had been reclaimed from a bush pasture, had been brought under careful cultivation, highly manured, and had produced excellent cultivated crops. One year ago last spring the field was sowed with oats, and an average crop secured, although attacked slightly with rust. Last fall, to secure a better seeding, the field was again plowed and dressed with manure and seeded to grass, which, up to the commencement of winter, presented an appearance of great excellence. The grass started last spring, but was soon overrun by sorrel, which continued to grow to the great disadvantage of the hay crop, and to such an extent, that at the middle of July, the grass upon the lot would hardly pay for mowing. The owner, very properly, was so thoroughly disgusted with the complete failure of his severe labor to make a beautiful field that he expressed a wish that it would sink forever from his sight. Now here would seem to be a case for investigation by experiment stations. It is very evident that there was some element in the soil that was injurious to grass growth. Our for itself the first season. impression is that the soil was too cold, and as is sometimes said, sour. We should like place, however, in a field of eight, the old to see the field treated to a liberal dressing

of lime, which we firmly believe would greatly improve it, or if plenty of horse manure was at hand, we believe a bountiful dressing of that would also bring about a very decided and favorable change. Such fields are the very places where experimental work should be undertaken, although it is it at a decided loss .- Germantown Tele, is one of the great butter-producing countries

Simple Rules for Butter-Making.

Rinse, in cold water, all dairy utensils o be used, such as churn, butter worker, wooden butter hands, etc. Now scald with hot water and rinse again

with cold. Always use a thermometer.

The churn and cream to be at a tempera ture of 50 degrees to 58 degrees in summer,

and 60 degrees in winter. Ventilate the churn freely and frequently during churping, until no air rushes out when the vent peg is taken ont.

Churn at 40 to 45 revolution per minute Stop churning immediately the butter

This can be ascertained by the sound; if in doubt, look. The butter should now be like grains of

nustard seed. Draw off the buttermilk, and wash the outter in the churn with plenty of cold water. Turn the churn two or three times very gently, then draw off the water and

clear and free from Make a strong brine and pour into the churn through a hair sieve. Wash the butter thoroughly and draw off brine; take the butter out of the churn and put it on the butter-worker, which use until every drop of battermilk is pressed out of the butter.

hands. [Issued to the press of Great Britain with the sanction of the Dairy Committee of the Royal Agricultural Society of England.

N. B. -Never touch the butter with your

Rye.

A correspondent of the Germantown Tele graph says: Rye is a crop that is not half appreciated. When farmers work on such crops as they think will pay the most direct profits, without looking ahead for future esults, they thus pursue that shortsighted policy which one too often sees. The benefit of growing rye is just of this kind; the results are of a permanent rather than of an immediate nature. The amount of money that can be made from selling the grain fo making whiskey or other purposes should not enter into the consideration. Rye is an excellent feed when ground and mixed with something not so rich. The first desirable feature connected with rye is that the work of sowing it has to be done during a comparatively leisure time and when the ground is in good condition for working; then the seed costs but little, and it can be sown at no cost at all for work by sowing it in the corn field at the last work ing. A man can ride on horseback and sow rye over the tops of his corn.

It is not necessary to sow rye before the niddle of September, except when sown for asture, which is doubtless the best use to which it can be put. The next best use for rye, I think, is in its value as a fertilizer if turned under while green. I have also mowed rye for hay, and plowed up the same ground early in June for a crop of almost anything I might want to plant, and although the stubble does not furnish much manure, it renders clay soil remarkably loose and mellow. I am not done ringing the praise of this, the most profitable farm crop I ever raised. I invariably endeavor to follow it up with something else for a second crop, even after the ripe grain is cut, planting on the stubble such things as late

weet corn, beets, cabbage, etc. I will say in this connection that Brother Mason does a good thing when he thus grows white beans. The charm of raising these crops after rye comes in right here Nothing can equal this for keeping down weeds and subduing foul ground. I think I do not exaggerate when I say that it is not half the labor to cultivate these crops that it is in the usual way. Let us briefly consider what we thus gain by saving onehalf the labor, especially where land is scarce and we are compelled to make the most of it. Suppose a crop ordinarily costs and with the weather we had, every ton of \$30 per acre and we raise \$30 worth of

stubble at an expense of \$15 in labor, we have a plain case of 100 per cent of profit, to say nothing about the value of the rye is ground foul with weed seed as a future pest on the other hand. The most profitneeds no cultivation.

Great Britain last year.

eeds for horses and milch cows.

GIVE the swine fresh clover or grass; pro vide them also with pienty of broken char

A FIELD of 120 acres of winter wheat near Bowling Green, Ky., yielded 3,088 bushels, an average of 25% bushels per acre.

ed from thirty-two million to forty-nine milion tons during the last eight years.

W. F. Brown says one pound of turnip seed is quite enough for an acre of land. In

straw are annually burned in Missouri "to get rid of it." Soon we shall hear that the soil of that State is becoming exhausted.

enough to cover the bed of the hay-rack, will catch not a little shelled grain during the drawing-in process, more than enough to pay

tions of the sparrows are so great that farmrows' heads. The birds are more destructive than any insect pests which prey on the crops.

pounds of butter exported from this country,

VERMONT is the only one of the eastern States that raises as many beans as it consumes. Ten per cent of those used in Boston come from Canada. New England raises about 100,000 bushels of beans and buys 500,000. Seventy per cent of the beans brought to Boston from the States come from Western New York.

going extentively into their use.

A WISCONSIN farmer who raises swine quite extensively, says swine are no more susceptible to disease than other classes of stock, but their constitutional vigor has been lowered by breeding from immature stock, and by unsanitary conditions where they are kept in large numbers. He says that in repeat the process until the water drawn off Wisconsin the income from thoroughbred sheep and wool combined.

> Save the net earnings of a whole season's work by buying The Aultman & Taylor Company, Thresher, Engine or Saw Mill directly from them. You get the middleman's commission directly off the purchase price Write to them at Mansfield, Ohio, for parti

Che Poultry Bard.

An Egg Shell.

The shell of all eggs is studded with small orifices, which are the means of absorption and exhalation by which the little animal in the egg respires. On this knowledge are grounded all the methods of preserving the egg by closing the pores. These pores are more or less visible, according to the species of egg. They are very apparent in the egg of the ostrich, and scarcely visible to the naked eye in other species, but their functions are no less active. Many eggs are laid naked, dry and smooth; others are impregnated with a greasy, glutinous substance. The latter are chiefly those of sea birds, or those which live in moist localities. This glutinous coating is doubtless intended to preserve the eggs from the water, or to maintain the degree of heat necessary to preserve life. Sometimes there are soft eggs laid entirely without shells, or without the albuminous inner membrane. This occurs chiefly in hens that are too fat, or have been over stimulated, or have not been able to obtain calcareous substances with their food. Egg shell is much used in medical preparations. When calcined at a low red heat it affords a very pure form of carbonate of

Risks at Exhibitions. Henry Hales, in the Rural New Yorker.

says: "No class of animals can be more susceptible to colds caused by draughts, change of coops, transportation, moisture, etc., than poultry. Few people realize thi, fact sufficiently. No one pays more dearly for this than exhibitors at poultry snows. After great care in getting the birds into good condition, and giving them all the attention possible, there is great risk in sending them away to exhibit, especially as these shows are generally late in fall or early in winter. If one takes the trouble to follow the birds en route, it is soon seen what changes they are exposed to, first on railroad platforms, then perhaps into hot, close express cars; from that into a wagon. If this is not open on top it is generally open at both ends. Then they are carried through windy, cold streets; then in the exhibition building, often waiting in their close packages hours before they can receive attention, and be put in their respective places on the benches. Next they are subjected to a change of food; they are

Agricultural Items.

TWENTY-SEVEN hundred silos were built i

Sweet corn fodder is one of the best of

THE hay crop of the United States has vari-

WASHINGTON TERRITORY must be a great country for potatoes. A resident of King County raised 8,000 bushels on 12 acres of virgin soil, 660 bushels to the acre.

sowing use only the thumb and forefinger; then the stand will not be too thick. Nor far from one million tons of wheat

A SHEET of heavy unbleached cotton, large

In the vicinity of Montreal the depredaers are imploring the municipalities to offer a price of ten cents for every dozen of spar-

It is a singular fact that out of 12,581,000 not always pleasant to carry on too much of 936,370 pounds should go to Denmark, which of Europe, which annually exports thousands of pounds. The question is, What use is

> W. I. CHAMBERLAIN tells Ohio farmers that he used 31/4 tons of superphosphate, 300 lbs. to the acre, on his wheat land, and is sure each ton of it will give him 100 hushels of wheat, aside from the benefit to the clover and timothy seeding. Still he advises farmers to experiment with these manures before

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are made of cheap and inferior materials and NONE SUCH Tooth HARROWS give poor, weak, crocky colors. To be sure of success, use only the DIAMOND DYES for coloring Dresses, Stockings, Yarns, Carpets, D. E. McSHERRY & CO. DAYTON, O. Feathers, Ribbons, &c., &c. We warrant them to color more goods, package for package, than any other dyes ever made, and to WARRANTED not to blow of will Willey give more brilliant and durable colors. Ask CHALLENGE

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Horticultural.

A Walk Through the Raspberries.

I have just returned from a tour of inspection among the raspberries and note some things that will have to be done at great extent. once. A few plants of those set this spring properly and the wind and snow break and a half or four feet than at six feet. them down. By pruning early they branch | Having given prominence to the opinions to seed before picking is over and must be pulled by hand or cut with a weed-cutter. The new patch set this spring contains Planet Jr. cultivator and have the weeds be hoed around them and a cabbage plant care of themselves, except pruning, the rest of the season.

we need, they are still too thick, and will like the black ones.

I would not cultivate an old plantation at grass between the rows. One patch so treated has been the most profitable one of without thorough drainage .- Toronto Mail. all. Mulching is cheaper than cultivation to keep down weeds. Speaking of weeds, there are enough going to seed in the road and corners of fences in this county to seed the State. By-and-by, in August, after they | the Kansas State Horticultural Society, said: have ripened their seed and farmers have a little time, they will have a spasm of virtue | the white grub is one of the most destrucand cut down the old stalks. It would pay a huge per cent if they would cut them now | bug or Dor bug, being known by all of these while in blossom.—Phila. Press.

Drainage of the Orchard.

Orchardists are frequently perplexed by the opposing views or opinious set forth on likely to be disturbed. The grubs live three many subjects by different persons who years before passing through the pupa state have had experience in fruit-growing. It and coming forth as beetles. During these would be a pleasing matter if no differences | three years of constant work upon the roots existed in the care of orchards or any of plants they do much damage to whatever pear orchard is expected to go on year after branch of farm work, but so long as climates kind they attack. It is not safe to set year producing abundant crops without any and treatment are rendered variable by such land should be cultivated at least two sea- nured, subject to bark lice, canker-worm, ions, differences must exist. The thoughtful farmer or fruit-grower should and plowing before using it for this purstudy all divergent views, and then try to pose. There are many other insect enemies reach a conclusion as to what mode suits his of the strawberry, but I shall only mention location or soil.

importance doubtless is the cause of many plans being practised or endorsed by orchardists. In order to give this subject the at all abundant it soon destroys the entire attention which it deserves the views of foliage and, of course, prevents further prominent orchardists are set forth, and growth of the plants. This worm is the any apparent contradictions that may be larva of a small black fly (Emphytus macugiven should be attributed to the surround- latus). The leaf-roller is a pale green worm, ings of the orchard rather than to the whims | the caterpillar of a handsome moth (Anchyof their owners.

Mr. Beadle believes in thoroughly underdraining the ground before the orchard is as food. A solution made of one or two for the goods. In every case the grower planted, if the subsoil is not naturally gravelly or porous enough for the water to soak through. The depth of the drain would depend somewhat on the tile, but should be or twice a week for three or four weeks, is some of the growers and the salesmen, which five feet. His experience convinces him recommended for their destruction. A betthat it is not the water which comes from terplan, when practicable, I think, is to burn the top that causes trouble, but that which dry straw over the plants, scattering it just comes from below. By sinking the drains five feet all chances of their being injured by frost are escaped, and the tiles may not be placed so close together. If before going down the five feet a clay soil is reached that is impervious to water, or hard sand, it is scarcely worth while going deeper. The soil in the vicinity where Mr. Beadle resides is mostly five or six feet deep before hard pan is reached, and he claims the best results from his mode of drainage. He says that by draining before planting the danger of injury to the trees is avoided that would follow if planting preceded drainage.

Mr. Beall endorsed Mr. Beadle's plan of deep drainage. The principle of it was set forth by English engineers, who lay down the rule that the benefits of drainage only extend to the square of the depth each way. That is to say, if you go three feet with a drain you only drain nine feet of land on each side of that drain. A three feet drain, therefore, would only drain a strip eighteen feet wide. The idea prevails among most set deeper they would receive the protection people, said Mr. Beall, that the object of of a deeper soil against sudden changes. under-draining is to get rid of the surface water; that if the surface water is to get off it is all right, and nothing more is required. Now, as a matter of fact, not one drop of that I can recommend it to vineyard plantwater should run off the surface, it must all ers. It is so simple, and applicable to all run through the soil; for the rain contains a varying conditions, that no one need hesilarge quantity of valuable manure, which tate about adopting it. I simply plowed should run into the soil, and if land is and cleaned out trenches in the fall as steep properly drained it takes in the summer rain, and the land is warmed; because the | and 20 inches deep, set the vines in the temperature of the rainfall is much higher than that of the soil itself. The rain percolating through the soil warms it. Then again, frost will not accumulate or go down nearly so deep in well-drained soil as in soil frost during the winter being enabled to that is not drained. In our country, where we have considerable snow, at any time during the winter you can run a stick down only gets down where the soil is wet.

drainage depended so much on the difference in the soil that no hard and fast rule that the frost had penetrated from the

as to depth can be laid down. He had an trenches sideways into the soil of the ridges, orchard which he was sure would not be heaving and loosening it much deeper and Blackberries and raspberries yield well, and country and Europe. The bee papers have everyone should use his own judgment to a subsoil plows.

Mr. Morton said: -In Scotland, where aid have died and more must be set in, as va- is given to draining, some years ago no aid cant places look had, give the weeds a would have been given to any drain under chance to grow and the wind to blow the four and a half feet deep; but I have been rest over, but worst of all, it is hard work to informed that within the last few years aid get the plants to grow and fill up if set in has been extended to drains three and a ends of a few of these feeding roots, but I may be a dish of Lima beans. We say next season. You can transplant raspber- half feet deep. That is because it has been could not perceive that this was a serious ries, if taken up carefully, when the new found that this very deep drainage is not injury, for new and more branching roots shoots are two feet high. We always allow adapted to the generality of soils that rethem to get a good start before setting in quire improvement by drainage. If there next season, and I imagined that it had rethe spring. The new growth is now 18 is a substratum of impervious soil near the inches high and will be topped off at once. surface a deep drain would not have as We use a sharp butcher knife or corn-cutter, | beneficial an effect as one somewhat shaland a swift stroke. Many growers let them lower. I think the generality of our soil grow too high. They do not branch out would be better drained at a depth of three

out so as to resemble trees, are well balanc- held by orchardists regarding drainage, we ed, and most important of all have more feel the necessity of a wider treatment of The fine top soil had fallen in from the capacity for fruit bearing from increased the case, and for that purpose make quotasurface. The second pruning consists of tions from Mr. Edward Wasell's "Manual of cutting off ends of side shoots in the bend, Drainage," an excellent little book, and one which causes them to send out shoots in all | that should be closely read by all farmers directions, but if you wish to raise plants and sanitarians:-Without good drainage it omit the last pruning. A few plants show is useless to hope for better times among symptoms of rust and will be dug up and farmers. In the north and northwest, burned without delay. I know of no other where the rigors of winter, and sometimes remedy, and if permitted to remain will the drought of summer, are left, there is no the soil working dry and mellow. - Philaruin the patch. Plants in a feeble condi- doubt the effects of drainage on a large scale tion or injured by severe cold are most would ameliorate the climate in winter, and likely to be attacked. The symptoms are the soil would retain its moisture in summer reddish dust on leaves and a large number to a much greater extent, because thoroughof thornless leaves. Some weeds are likely ly drained land is not only of higher temperature, or warmer in cold weather, but it holds its moisture longer in drought, which generally occurs when evaporation is rapid Ohios for evaporating and Greggs for during summer. It is not uncommon to find market. They are getting weedy and will the soil light and porous on the surface but receive a thorough cultivation with the the subsoil impervious, and a soil thus constituted is literally baked under a hot sun. cut out of the hills. A little dirt will also A sure indication of impervious subsoil is the growth of aquatic plants in places where set in each space one way. They will take the land is so situated that from general indications they should not be there. When walking over pastures in summertime, after After taking up all the red raspberry sets a rain, if we feel the land spongy instead of springy to the feet, that land needs drainbe thinned out to one cane to the foot and age. It has a subsoil composed of clay, tops pinched off, when they will branch out hard-pan, or other impervious substance, and will be, in either dry or wet weather, next to useless. Such land can never be all, but keep it heavily mulched with swale made, under any system of cultivation, manuring or other operation, fit for husbandry

Two Foes of the Strawberry.

Miss Cora Dixon, in a paper read before Among the insect enemies of the strawberry, tive. It is the larva of the May beetle, June names in different parts of the country. These beetles frequent meadows, pastures and uncultivated fields for the purpose of depositing their eggs in places where their young will be sure of plenty of food and not two of them, the strawberry worm and the nure, the owner in disgust resolves upon its Drainage is an important subject, but its leaf-roller. The first mentioned is a small, total eradication. - Canadian Horticulturslender, pale green worm, that attacks the leaves, eating large holes in them, and when lopera fragariæ). Its plan of action is to roll up the leaf and use it first as a bed, then spoonfuls of the dry Paris green or London found that the goods had been sold for a purple to two or three gallons of water, higher price than had been remitted by the sprinkled on the plants after fruiting, once thick enough to burn the leaves but not the crowns. The strawberry plantation should diverting the bulk of garden produce to the not remain upon the same land more than provincial markets, where, as a rule, the two years-one year is preferable. Insect enemies soon learn that old beds are a safe place for them to deposit their eggs. It is easier to set out a new bed of berries than to clear an old one of weeds, and the newer

Ingenious Subsoiling.

Judging from my own experience I think that the roots of the vine need to penetrate the subsoil. I am aware that of late it has been recommended and practiced to set out vineyards upon a cheap scale without trenching or subsoiling.

plantation bears much larger and finer fruit.

This in my judgment is the chief reason why the vine suffers so much from sporadic diseases. The roots being too near the surface are subjected to all the changes and vicissitudes of climatic conditions, while if

An experiment that I made a few years ago saves so much of my heavy expense of subsoiling, and has proved so satisfactory, as their sides could be made eight feet apart trenches in the following spring and filled

tnem in again mainly with the plow. The reason for success in this experiment of fall trenching is found in the action of penetrate the subsoil deeper than it could otherwise do through the means of these open trenches, thereby fining and commininto ground that has been well drained. uting the soil and subsoil and bringing up to There is never any frost after we get a foot the surface some of the lost fertility of past and a half or two feet of snow. The frost ages. I found to my great surprise that before the frost had gone out of the ground Mr. White thought the question of deep the trenches were deeper or the ridges were higher in the spring than the fall, showing berries ripen every month in the year, and upon the authority of an eminent chemist

Subsequently it was shown that as the roots of the vines spread out and grew the feeding roots at the ends gradually rose a little as they approached the centers of the rows, and that occasionally the plow in the subsequent tillage of the vines cut off the were sent out from the severed ones the vegetables are not the particular attracinvigorated the vines, and caused them to grow more luxuriantly, but I could not express a positive opinion as to this, without more experience and observation.

Another point gained was, that in the spring I did not have to dig holes to set the vines at a busy season of the year. The holes were already dug just the right depth. possible conditions after strewing a little phosphate, ashes and bone dust in the trench, for the fine subsequent, healthy and vigorous growth optained, and I found that I could work the soil some two weeks earlier than that untrenched. I actually set the vines while there was yet frost in the ridges, delphia Gardener.

Pruning for Fruitfulness.

When an apple or pear orchard has been highly cultivated and manured it is sometimes found to produce a very vigorous wood growth, and little or no fruit. This has led cultivators to resort to various expedients for producing a fruitful condition. and among these summer pruning, performed between the 15th of June and the 20th of July, has been found somewhat effective. The removal of a portion of the limbs of foliage in winter or spring would result in a more vigorous growth, but at this season the shock checks the circulation and tends to the formation of fruit buds.

Root pruning will also tend to decrease the vigor of a tree, and so induce fruitfulness; this should not be done in the growing season, but rather in the autumn or early winter. Ringing, or removing a ring of bark from a quarter to half an inch wide, in midsummer, is practiced by some, as it stops the descending flow of sap and compels it to produce fruit buds; but the practice is generally condemned. Bending s limb downward, or tying a band tightly about a branch, will sometimes have an equally good effect. We noticed an instance of this in an orchard of a friend, where the children's swing rope had been tied about one of the limbs, and as a result that limb was weighed down with fruit, while the rest of the tree was barren.

We are of the opinion that the cause of so much barrenness in the orchards of some portions of Western Ontario is to be found, not in a too vigorous growth, but rather in a lack of vigor; and that the remedy that is more frequently needed is better care and cultivation, rather than any of the cures mentioned above. Too often the apple or then because the acre of orchard does not pay as well as the acre of grain or reots, which has had all the work and all the ma

Dishonest Salesmen.

The London Horticultural Times says that unpleasant exposures have recently been made in Covent Garden market by certain large growers who placed letters in the bottom of their baskets of fruit, &c., (with stamped envelopes for reply) asking the buyers to forward the price they paid salesmen. Interviews followed between were brief and unpleasant. The commission men were compelled to repay every farthing they had taken, and narrowly escaped being prosecuted. Such conduct is salesmen are of a higher calibre.

Southern California.

The fourth annual report of the Los Angeles Board of Trade contains some interesting statements relative to the fruit products of that region. One of the most abundant products is raisins. The varieties cultivated for this purpose are the Muscat of Alexandria, Sultana, White Corinth and Black Corinth. The last two are not productive enough, and the Sultana is not yet overcharges. For instance, one carload of sufficiently tried. The Muscat of Alexan- strawberries sent to Pittsburg was neglected dria, producing the Muscatel raisins, is the leading raisin grape of the country. It is route. The berries sold for 2% cents a quart found important not to prune the vine closely, and to leave plenty of spurs with buds for producing wood the next year. The grapes are dried in trays in some cases but they may be cured best on the ground on selected spots. Twelve days are sufficient for curing early fruit, but later in the season, sometimes two or three times longer, Southern California shipped last season 1,969 carloads of oranges and lemons, and 281 carloads sold at home and by express, worth there \$800,000. A large market is claimed in prospect, as there are now imported into the United States annually about eight million pounds of figs, 57 million pounds of French prunes, over four million pounds of almonds, 53 million pounds of raisins, 18 thousand carloads of oranges and lemons, and smaller amounts of other products. It is claimed that California can produce 60 million pounds of prunes, instead of having to import. In the next decade there will be 60 million people, and American Bee Journal and their iteration this report remarks that if those engaged in by other apicultural journals, has written the fruit industry will eradicate insect pests, to several of them a plain, frank, gentletake good care of their orchards, and cultivate the very best varieties, they must make the statement relative to the adulterareap a large reward. Some of the smaller fruits are cultivated with success. Straw-

\$3 a quart, and before Florida fruit is ripe. rated by chemical analyses both in this

The Vegetable Garden.

For many a month in the year the table of many an industrious country home has rarely any other vegetable than potatoes. Some have tomatoes for a few months, corn for a few weeks, and now and then there nothing of the cabbage or a few other kinds in some places, but as a general thing, good tions of a farmer's table. When we come to meat preparations, pies, puddings, sauces, and all such knick-knicks, the farmers' girls are not behind the rest of the world.

But it is not their fault. If it was unreasonable to expect the Israelites to make bricks without straw, it is a worse case here. If the head of the household does not raise the vegetables, how shall the girls cook them? And that they do not raise them is a genersides of the ditches, making the very best al complaint and lamentable fact. Even when they are brought to feel that the women will have vegetables, they go to work grudgready," "put in the oats," or something or The Journal says honey has been adulteratthrone " insists on it. A little manure is and then with the harrow, and then the women and boys must get along as best they

> Now, this is not the way the thing is always done; but our readers will bear witness to the fact that they have none of them to go far to find the picture we have drawn Now, most men like good vegetables, preferring some kinds to others, of course, and the indifference can only be through supposing it costs more to raise them properly than it does.

One of the mistakes of vegetable growing for one's own personal use is to grow more than is required. Too much ground is taken up. Too much labor then has to be given in proportion to the desired results. Vegetables as a rule require a much richer soil than the average of farm crops; but when once they have a deep rich soil, it is wonderful how many a very small piece of ground will produce. - Germantown Telegraph.

Horticultural Items.

In England strawberry plants are consider ed at their best when two or three years old, quite the opposite of our American methods, which never take more than the second crop without plowing up, and often but the one

AMERICAN orchardists must soon meet the competition in English markets of apple growers in Australia and Tasmania. The imports of choice apples from these latter points has already increased to such an extent as to affect British fruit-growers.

A CORRESPONDENT of the Country Gentleman tried the experiment of wrapping burdock leaves around the stems of cabbage plants to prevent the attacks of the cutworm. The exposed part of the leaves soon withered and and soils vary, and modes of cultivation strawberries on freshly-plowed sod, but the attention, unpruned, uncultivated, unma-dried up, leaving the plants without protection and the cutworms "got in their work." sons in some crop requiring frequent hoeing borer, web-worm, codling moth, etc.; and He then returned to his old plan of wrapping workers, has all the plasticity of a fluid the stems in stiff brown naper. found a perfect protection.

> T. B. TERRY, who is one of the farmers who believes that the best is none too good for the agriculturist, and advecates gardens and small fruits for the home, says his "young folks " took care of a quarter acre of Downing strawberries and sold \$88.57 worth of berries. The family ate their fill of luscious fruit three times a day for 22 days, and it is estimated the home corsumption was at least en bushels, besides five bushels canned for winter use. The berries were sold at \$4 per bushel because they were so large and even.

R. S. Cole, in Farm and Home, warns horticulturists not to be in a hurry about pronouncing upon the merits of new fruits. He has grown strawberries for 36 years, and knows no variety can be fairly tested in one season. He remembers how his neighbors plowed under the Wilson and Crescent a worthless after one season's trial, and after wards paid big prices for plants from others who held on to them. There are so many varied conditions of soil, climate, location, season and modes of culture to which the strawberry is subject in this country, that only thorough tests are the criterion by which we may judge of the value of a variety upon its first introduction.

THE New Jersey Fruit-Growers' Association have arranged with commission merchants who handle their fruits by which the latter receives eight per cent commission instead of ten. The two per cent saved pays the expenses of the Association. Proof of the effectiveness and value of the Association is the fact that about \$1,200 was collected by f from railroads last season for damages and by the railroad employes and not re-leed e when the market price was eight. The rail road company made good the less, amounting to \$415, and the money was in the treasury of the Association in less than sixty days.

Hood's Sarsaparilla do not be induced to take any other. Hood's Sarsaparilla is a peculiar medicine, possessing, by virtue of its peci liar combination, proportion and preparation curative power superior to any other article of the kind

Apiarian.

GIVE US A CHANGE.

Prof. H. M. Wiley, apparently grown profoundly weary of the changes rung upon the "wilful lie" and "Wiley lie" by the manly letter explaining how he came to tion of honey which has got him into such extremely hot water-a statement made in winter have been sold in New York for since deceased, and in part at least corrobo-

benefited by going down five feet. It was refining it as I had never before observed currants grow freely in the lowlands. published this letter, which is certainly as under any other conditions. I found that I While not enjoying all the privileges of much of an amende honorable as any man that honey has been adulterated, but alleges it is not done now, simply because the price is so low it does not pay. Prof. Wiley's is so low it does not pay. Prof. Wiley's article in the *Popular Science Monthly*, which stirred up such a bees' nest, was writwhich stirred up such a bees' nest, was written in 1881. Both charge adulteration, but differ in how it is done. It makes little

difference to the consumer how he gets his

glucose, if get it he must. Samples of honey from a well known beekeeper were reported after analysis as "apparently adulterated." Further samples were asked for and indignantly refused. Both rogues and honest men can work the "indignation dodge;" it would have been better to have forwarded other samples and tood the test. Yet the Journal says "the component parts of honey vary so much that few, if any, can positively determine. even by analysis, the purity thereof." If this be true-and the Journal would never fall into those "Wiley ways" it has so often denounced-adulterated and unadulterated seem to stand an equal chance, and it is a ingly. They must "get the corn ground clear case of "great cry and little wool." another, and can't afford the time to be ed, and that adulteration is difficult to plowing up the truck patch, or digging up detect; Prof. Wiley says honey has been the garden. But the "power behind the adulterated, and chemistry has detected. Either way the public is heartily tired of the dragged on to some out-of-the-way piece of unprofitable controversy—which on one side land, the soil scratched over with the plow, at least, reminds us of the minister's best sermon, which he always preached when he did not wish to write a fresh one-and begs, with due humility, for a change.

How Bees Make Cells.

In Murray's Magazine we find the following explanation of the geometrical forms which the cells of the honey comb assume: Recent measurements and observations have tended to dissipate the cell myth, and to show not only that honey comb is far from regular, but that such regularity as it has is due merely to mechanical conditions

Mr. Frank Cheshire tells us in his recent volume, that careful measurements of the finest pieces of comb, built with every ad. vantage for securing regularity, show that so far from every cell being geometrically accurate, it is difficult to find a hexagon presenting errors of less than three or four degrees in its angles. On the other hand there is a growing tendency to accept a modification of Buffon's explanation of the origin of cell structure. Buffon attributed the regularity of the cells to mutual pressure: in illustration whereof he packed a closed vessel with dried peas and filled up the interstices with water. The peas, which the pressure which resulted, the form of

more or less accurate geometrical figures. Perhaps a still better illustration of this principle of mutual inter-action is seen in soap-bubbles. If a little soapy water is placed in the bottom of a tumbler and air he blown into the water through a tube until the upper part of the glass is full of bubbles, the hexagonal which these bubbles assum under mutual pressure, and the trilateral pyramids at their bases, will be readily seen. Not that these geometrical figures are the same as those which the wax assumes, but they illustrate the principle. For, at the temperature of the hives, the wax, pared thin by the smooth-edged jaws of the membrane. The bee has indeed to avoid the paring away too far, and thus making a hole through the wall. But even here it

may be aided by mechanical conditions. If we take a thin piece of soap and pare away one face with the blade of a pocket knife, we shall soon form a transparent patch where the soan is very thin. But if we continue to pare we do not cut through the soap at this point; but for a time at least, we merely enlarge the area of the transparent patch. The thin film of soap yields at this point, and the stress of the blade falls on thicker and less yielding edges. Some such mechanical yielding of the wax may guide the bee in its work.

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NEW ADVERTISEMENTS.

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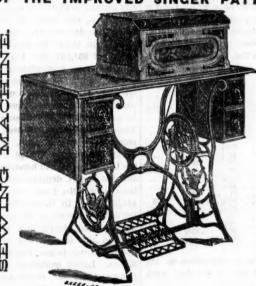
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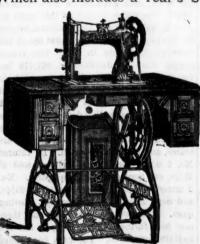
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WHEAT.

The receipts of wheat in this market the past week amounted to 211,333 bu., against 66,321 bu. the previous week, and 311,306 bu, for corresponding week in 1887. Shipments for the week were 78,841 bu. against 16, 209 bu, the previous week and 282, 794 bu. the corresponding week in 1887. The stocks of wheat now held in this city amount to 236,007 bu., against 129,204 bu. last week, and 478,833 bu. at the corresponding date in 1887. The visible supply of this grain on July 28 was 22,154,996 bu. against 21,644,-810 the previous week, and 33,132,228 for the corresponding week in 1887. This shows an increase from the amount reported the previous week of 510,186 bushels. As compared with a year ago the visible supply shows a decrease of 10,977,232 bu.

During the most of the past week the tone

of the market was favorable to sellers, but light demands for the export trade, reports of more favorable weather in Great Britain and on the Continent, with the belief that the crop in this country will be somewhat larger than anticipated, have served to weaken the market, and the tendency yesterday was downwards from the opening. No. 1 white is selling nearly even with No. 2 red, but the latter is in better shape for shipping at present owing to its being harvested earlier. A good deal of the receipts of red wheat come from Indiana. No. 1 white has lost 2c during the week, while No. 2 red has advanced that much. A good deal of the receipts of red wheat only grades No. 3 and sells at 81c per bu., or six cents below No. For 2. York were lower yesterday, while L and Liverpool were quiet and steady.

The following table exhibits the daily clos ing prices of spot wheat in this market from

		No. 1 White.	No. 2 Red.	No. 3 Red.
July	10	91	86	
+4	11		86	
44	12	91	87	
64	18		8614	77%
46		91	8614	11.78
-	14	**		
	16	91%	87	****
4.0	17	9134	8734	
58	18	9214	87	
56	19	9814	87	
46	20		88	
5.6	21	92	85	
44	28	92	84	
84	24	9144	8314	****
66	25		85	
66	26	91	8414	
68	27		85	78
66	28	8814	8734	7914
45	30	89	89	82%
4	31	8814	90	83
Aug.	1	8814	88%	
to the	0	00	991/	69

For No. 2 red the closing prices on th warious deals each day of the past week

were as follows:				
	Aug.	Sept.	Oct.	Nov.
Sat irdsy	85 %	86		
Monday	88 %	8814		
Tuesday	86%	86 %	****	
Wednesday	87%	881/2	****	
Thursday	87%	8816		

For No. 1 white the closing prices of the various deals each day of the past week

were as follows:				
	Aug.	Sept,	Oct.	Nov.
Saturday	86			
Monday	22.5			****
Tuesday	8614			****
Wednesday	871/	871/	126	
Thursday	OW.	8814	****	

Private elevators in Chicago are estimated to contain an aggregate of about 859,000 bu wheat which is not included in the visible supply. But with that amount added the supply is a very light one.

It is reported that the crop in the northwest has been damaged some by rust and blight.

The stock of wheat in Liverpool is reported as equal to 3,840,000 bu. against 4,300, 000 bu. a month ago and 8,260,000 bu. year ago. The wheat and flour on ocean passage has increased 480,000 bg, since the last previous statement, while that of corn

Cable reports received at Chicago state at least 6,000,000 qrs. (48,000,000 bu.) and 2 mixed, August delivery sold at 25%c, that with the most favorable weather from this time till the close of harvest the English wheat crop will be 30 per cent less than last

Advices from Russia say that owing to the poor harvests in southern and western Europe, extraordinarily large orders for new grain have already been received at Odessa, and the exports thence this fall are expected to be enormously large. Harvest prospects in South Russia generally are most satisfactory especially in Cherson, Taurida and Bessarabia. In the northwestern parts of Russia prospects are less satisfactory, but

an average yield is nevertheless expected. In Austro-Hungary the weather has been peculiarly unfavorable for wheat, rain fall-

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for the development of the plant, while the | 88c. In futures No. 2 mixed for August downpour became uninterrupted when the delivery sold at 30%c, September at 29%@ harvest was about to commence. The 29%c, and October at 29%@30c. Westofficial report of July 2 states that the wheat ern sold at 42@47c for white, and 36@39c fields in some districts have been laid and for mixed. that rust has set in. A telegram from Pesth, July 11, to the London Standard, says that the wheat, rye and barley crops have been harvested throughout Hungary, except in the northern part, and that the yield generally is estimated at 20 to 25 per cent less than last year.

Wheat shipments from South Australia are progressing slowly. Stocks in the interior are very large and as holders are firm and European prices are unsatisfactory, large stocks will probably be carried over to next season. Victoria is also shipping slowly, and on June 1 the remaining surplus amounted to 120,000 tons. One of the obstacles in the way of shipping wheat to Europe is the difficulty of obtaining ships at a moderate rate of freight.

The following table shows the quantity of wheat "in sight" at the dates named, in the United States, Canada, and on passage to Great Britain and the Continent of Eu-

Visible supply	Bushels. 22,418,268 16,544,000 8,080,000
Total bushels July 7, 1888 Total previous week. Total two weeks ago Total July 9, 1888	42,042,268 44 548,727 47,867,969 54,280,898

The estimated receipts of foreign and ome-grown wheat in the Euglish markets during the week ending July 21 were 369,400 bu. more than the estimated consumption; and for the eight weeks ending July 7 the receipts are estimated to have been 42,768 bu. less than the consumption. The receipts show an increase for those eight weeks of 3,473,232 bu. as compared with the corresponding eight weeks in 1887.

Shipments of wheat from India for the week ending July 21, 1888, as per special cable to the New York Produce Exchange, aggregated 500,000 bu., of which 380,000 was for the United Kingdom and 120,-000 to the Continent. The shipments for the previous week, as cabled, amounted to 680,000 bushels, of which 280,000 went to the United Kingdom and 400,000 to the Continent. The shipments from that country from April 1, the beginning of the crop year, to July 21, aggregate 15,200,000 bu., about equally divided between the United Kingdom and the Continent. The wheat on passage from India July 9 was estimated at 4,768,000 bu. One year ago the quantity was 75,552,000 bu.

The Liverpool market on Friday was quoted dull with poor demand. Quotations for American wheat are as follows: No. 2 winter, 6s. 61/4d. @6s. 71/4d. per cental; No. 2 spring, 6s. 61/4d. @6s. 71/4d.; California No. 1 6s. 7%d@6s. 8%d.

CORN AND OATS.

CORN. The receipts of corn in this market the past week were 13,352 bu., against 11,471 bu. the previous week, and 7,746 bu. for the corresponding week in 1887. Shipments for the week were 5,388 bu., against 19,036 bu. the previous week, and 7,746 bu. for the corresponding week in 1887. The visible supply of corn in the country on July 28 amounted to 8,374,133 bu. against 8,389, 857 bu. the previous week, and 7,542,466 bu. future delivery values are all higher than at the same date in 1887. The visible supply a week ago, although there was a consider- shows a decrease during the week indicated able decline yesterday. Chicago and New of 15,724 bu. The stocks now held in this amount to 23,012 bu. against 24,278 bu. last week, and 5,005 bu. at the corresresponding date in 1887. As compared with a year ago the visible supply shows an increase of 831,667 bu. Corn closes weak, with values on spot slightly lower than a a week ago. The promise of the largest erop ever grown in the country, although some months must yet elapse before it can be made available, is weakening the market. Thea the price here has been too high to permit of large exports, and southern Europe has supplied a large share of what the United States had heretofore furnished. and the export demand consequently has been light. No. 2 sold here yesterday at 46 1/4 @46 1/2c. In futures No. 2 for Decemper delivery opened at 39 %c, and closed at egc, the same figures as a week ago. A Chicago the market was very irregular, inally closing below the previous day's iguies. Latest quotations there were as follows: No. 2 spot, 45 %c; August delivery, 45%c; September, 45%c; October, 44%c;

May, 39%c. These prices are all higher than a week ago. The Liverpool market on Friday was quiet and demand light. The following are the latest cable quotations from Liverpool: Spot mixed, 4s, 7d, per cental, Futures: August delivery, dull at 4s. 7d.:

September, 4s. 71/d. per cental.

OATS. The receipts at this point for the week were 28,162 bu., against 11,568 bu. the previous week, and 66,414 bu. for the corresponding week last year. The shipments for the week orresponding date in 1887. The visible supply shows a decrease of 367,379 bu. for the week indicated. Stocks held in store here amount to 11,338 bu., against bu. at the corresponding date in 1887. Oats are steady, with sales of new No. 2 white at 31c, and No. 2 mixed at 27c. Old are carce, and no sales reported. In futures No. 2 white for August delivery sold at and September at 25 1/4 c per bu., closing quiet. Receipts are increasing, and there may be a further decline in spot, but not anything important. The crop has yielded quality. At Chicago the market was firmer all futures. Light receipts and wet weather as follows: No. 2 mixed, spot, 25@281/c; present season, so far as we can learn. August delivery, 25c; September, 241/4c;

October, 25%c, and May at 28%c per bu.

The New York market is slightly higher

than a week ago, except for western white

under light receipts. Quotations in that mar-

ing only at intervals when it was needed No. 3 white, 391/20400; No. 2 mixed, 361/20

DAIRY PRODUCTS. BUTTER.

Market quiet and unchanged, with fancy dairy firm at current figures. Receipts are lighter, however, and an improvement in values would not be a surprise. Fancy dairy is quoted at 16@17c per lb., and fair to good at 12@15c. A good deal of moor stock has been got rid of the past few days at about 10c ner lb. Creamery holds steady at 18@20c, but the demand is far from active. At Chicago butter has declined about a cent during the week, and the market is quoted dull and easy. Aside

from choice to fancy creameries, which were in some favor on local account, the outward movement was slow. Packing stock was held at 10%@11%c per lb.: fancy Elgin creameries, 18@18%c per lb.; fine Iowa, Wisconsin, and Minnesota do, 17@171/c; fair to good do, 15%@17c; fancy dairies, 15@15%c; common to fair do, 12%@14c. The New York market is quoted dull and heavy, with prices 1/4 @1c lower than a week ago. Stocks are large, and receipts are beyond the requirements of the trade. Exporters are doing very little.

EASTERN STOCK.	
Creamery, State, pails, fancy	20 @2014
Creamery, State, tubs, fancy	© 30
C:eamery, prime	17 @171/
Creamery, good	15 @1514
Creamery, fair	13%@14%
State dairy, tubs, good	174 @18
State dairy, tubs, fair	15 @16%
State dairy, Welsh, prime	17 @17%
State dairy, Welsh, fair to good	15 @16
WESTERN STOCK.	
Western Creamery, fancy	19 (2)1946
Creamery, Elgin, fancy	1946020
Western imitation creamery, choice	@16
Western do, good to prime	14 @15
Western dairy, fine	@15
Western dairy, good	18 @14
Western dairy, ordinary	12 @1214
Western factory, tubs, June choice	14 @14%
Western factory, June choice, firkins Western factory, prime	14 14 @ 15 13 @ 14
Western factory, ordinary	11 @12%
The state of the s	4014/8
CHEESE.	
* .	ned there

is no change in the situation; but at the east there appears to be some symptoms of weakness which may culminate in decline in values if present conditions continue. Prices in New York are above an export basis, it is claimed, and exporters say that they must decline before much business can be done, as the foreign trade is in a position to secure stock on a more advantageous basis than present American prices will afford them. However that may be, it is certain the demand has slackened up within the past ten days from some cause. Quotations in this market are unchanged, full cream State being quoted at 9@91/c per lb., Ohio at 8@81/c, and New York at 9%@10c per lb. Skims are selling at 5@8c per lb. At Chicago reports say that each day brings in liberal quantities of this staple, mostly full creams, and as the export movement is small stocks show an accumulation, and the feeling is easy. Home buyers are taking only a moderate amount of twins and cheddars, as follows: Cheddars, 8@81/4c per lb.; do flats, 81/4@ 81/4c; do Young America, 81/4@9c; poor to hoice skims, 2@6c. The New York mar ret is quiet and without any new features. So far prices have ruled steady, and quotations show little change for the week. The cy grades are firmer than the balance o the list. Exporters were doing more yes terday, and this helped the market. Some lots of fancy colored Oswego County brought 91/6c, but 91/8c is about the best price for the best. Quotations in that mar

ket yesterday were as follows:		
	9 6 8 8 6 6 8 8 8 6 6 6 6 6 6 6 6 6 6 6	9 8% 8% 6% 4 8
Ohio flats, ordinary	7 0	71%
The receipts of cheese in New Y	ork	for

the week ending July 24 were 79,476 boxes, against 94,504 the previous week, and 87,844 boxes the corresponding week n 1887. The exports from all Atlantic ports for the same week were 11,626,447 lbs., against 9,559,732 lbs. the previous week, and 8,661,771 lbs. the corresponding week in 1887.

The Liverpool market on Friday was nuoted dull for American white and colored at 46s. 0d. per cwt., the same figures quoted last week.

WOOL.

There is a better tone observable in the astern markets, and the movement of domestic wool has increased. This was to be expected when the new clip had been put on sale, as manu scturers would naturally wish to have larger stocks to select from. So far prices have not reached a point which will make any money for buyers on a good in the London warkets from 1s. 8d. to 2s. were nothing against nothing the previ- deal of their purchases. At Boston 261/20 ous week, and 4,002 bu, for same week in is the highest offer for Michigan X wools, 1887. The visible supply of this grain on and a good deal of the best fine wools in July 28 was 2,685,404 bu., against 3,052,783 this State cost buyers 24 to 25 cents. bu. the previous week, and 2,084,080 at the Whether, under the more active demand, prices will advance to a point which will enable them to clear a profit is one of those questions which only a prophet could deter. mine. The belief that the Mills bill cannot 12,594 bu. the previous week, and 52,229 pass the Senate is strengthening the market, as if it does not no tariff bill can become law until the next Congress meets, and much of the clip of 1888 will have been manufactured into goods before that time-That some dealers look for an advance in that the French wheat crop will be short by 281/4c, and September at same figures. No. prices seems to be certain, as buyers are said to be actively at work in Ohio and Pennsylvania, and paying 26 to 27 cents for ordinary fine fleeces, and as high as 30 cents for choice, fully a cent more than they were offering the growers in June, and as high as well in this State, and generally of good 25 to 26 cents are reported from Michigan by eastern papers, but we confess we have and more active, with an advance of %c on | not been able to verify this latter statement, For the finest Michigan fleeces 25 cents is caused the advance. Closing prices were the highest price paid in this State the

> At Boston business in domestic wools has been fairly active, and the tone of the market decidedly better for the seller. New wools are held firmly at the present range which have declined. Market closed firm of values, while old stock has been let go at concessions so as to close it out. Manu. ket are as follows: No. 2 white, 401/642c; facturers are certainly buying with more

freedom, but confine their purchases to smaller amounts than usual at this season. It is evident they intend keeping close to shore, and that the market will probably

rule rather slow but steady in consequence. At New York the Economist reports sales of X and XX Ohio fleeces at 27@29c, fine delaine at 30c, Oregon at 17@18, Territory at 18%c, spring Texas at 17@18c for good and 121/2@13c for low grades. The market there also shows a hardening tendency which may culminate in a slight advance in all grades of desirable domestic fleeces. Dealers appear to agree that with present low prices and the strong tone of foreign markets a further decline in prices is not to be expected.

The sales at Antwerp the past week howed that there were no signs of weakness in that market, where a great deal of the South American clip is disposed of. The foreign markets are all firm, and this will probably be the case for the remainder of this year, as the bulk of the clip for 1888 has already been disposed of.

A telegraphic report of the Boston mar ket of yesterday says:

"The sales for the past week comprise 3, 438,700 lbs. of domestic fleece and pulled an acre) has been checked—the farmers and 666,000 lbs. of foreign, making the finding it no longer a profitable business week's transactions foot up 4,104,700 lbs. against 2,161,200 lbs. for the previous week and 3,282,100 lbs. for the corresponding week last year. There has been rathe nore buyers the last week, and the tone of the market is a little improved. An in creased belief in the stability of values i manifest, though few have any expectatio Ohio XX has received a little more atter Most of the transactions are at 29c, though a little choice wool was sold at 30c X is quiet at 27c. Michigan X has moved quite freely at 25% @26c. Holders are, however, pretty firm in their views at 26c or 27c on a clean basis. Some wool was sold this week at 27c. No. combing wools are scarce. Medium cloth ing wool is quiet. Delaines are in moderate request and prices vary according to condi Michigan ranges from 27c to 29c and and Ohio from 30 to 32c, though some is held above the latter figure. Indiana and Missouri unwashed combing is quiet. ritory wools are in good request on a basis of 50c for average wool to 52c for choice long-stapled Montana. More inquiry is noticed for Australian. There are 500 bale of Montevideo wool on the market which is held at 27@271/c, equivalent to about 62c clean. Some Cape wool has been sold at 65@67%c on a clean basis. Little move ment is noted in carpet wools."

The following is a record of prices made up from actual sales in the eastern markets: Ohio XX and above, 291/4@30c; Ohio XX, 28@29c; Ohio X, 27@28c; Ohio No. 1, 32@ 83c; Michigan X, 251/26261/c; Michigan No. . 30@32c; Ohio delaine, 30@32c; Michigan delaine, 28@29c; Ohio unwashed and anmerchantable, 18@20c; Michigan do., 17 @20c; No. 1 Ohio combing, washed, 84@35c; do Michigan, 32@33c; Kentucky and Indiana %-blood combing, 26@27c; do 4-blood combing, 24@25c; Missouri and Illinois %-blood combing, 24@25c; do 1/4 blood combing, 23@24c; Texas fine, 12 do medium, 12 months, 20@22c; do 8 to 8 months, 18@20c; do fall fine, 13@15c; do medium, 15@16c; do heavy, 3@5c less; Georgia, 24@25c; California northern spring burry and defective, 10@11c; Australia combing, 35@41c; do cross-bred, 36@40c; do clothing, 29@33c; Cape, 25@27c; English 1/4 to 3/4 blood, 331/4@37c.

WOOL-GROWING IN THE UNITED STATES.

Where the Finest Fleeces are Grown, and **Vool-Growing** is Not Prosperous

The editor of the U.S. Economist in ommenting upon an interview which appeared in the N. Y. Tribune from Gen. Jas. S. Robinson, of Ohio, gives some interesting points regarding wool-growing in the United States. It will be noted that the statements made corroborate what has been frequently asserted by the FARMER. -that in the United States can be grown every grade of wool which is needed in the manufacture of all grades of woolen goods and that it is not only a patriotic duty but good business sense to encourage their production. The Econ omist say "General Robinson, as an Ohio man

ought to know that the finest wool in the world is not grown in South America. The finest wool in the world is grown in Silesia. The next finest is grown in Washington County, Pennsylvania, and across the border in two or three counties in Ohio and in a small section in West Virginia. It is a mooted question which of the three States is entitled to the laurels. Excellent judges think that West Virginia raises the finest grade of wool, and this is called picknick This wool is worth about half a dollar washed or a dollar scoured. Another grade above XXX is the picklock wool, which is worth about 70 cents a pound scoured This latter type and the choicest Australian, are superior to any South American wools. The finest washed Port Phillip and from Americans. The latter are trying to Australian lambs' wools command to-day or say, 40c. to 50c. On this wool, and all wools above 1s. 3d. a pound, there is a duty now of twenty cents a pound, and if this duty is taken off of all the fine blooded wool the farmers of this country would send all their fine sheep to the slaughter at once. Then what would happen? Fine washed oil is in a heated state, the resulting produc wool of the class we speak of would go down 20 cents a pound, and scoured would fall 30c. in price and fluctuation would follow in the next year or two t such an alarming extent as to bring around discredit and a money crisis that could not fail to bankrupt and to close many mills, perhaps through sheriff's sale. Fine wools would then advance abroad a little out that would be poor consolation to us after our high blooded sheep industry was destroyed. The outcome of all this would be in the end to send those fine sorts back again in price to par-where they belongto half a dollar a pound for XXX Ohio.

the Cape of Good Hope, have long been regarded as the softest and best felting wools n the world, and absolutely needed in the production of face cloths. But these wools are known to carry a very heavy shrink, from 57 to 68 per cent, and also a burr of two types, a thorny burr and spiral burr, which neces sitates great care if not caution on the part of manufacturers using them in the production of any delicate or fine goods, as the consume the smoke and cinders which are

presence of one of those burrs in a piece of goods may or would destroy its sale.

"Now, before the tariff of 1867 became

and when scoured they cost our manufacturers a good round price. Besides, all who had occasion to use them had to purchase a burring machine, to free the wools from their entangling burrs. But the Tariff Act led to the encouragement of the growth of a similar class of wool in this country, which went to supplant the Cape and South American, and as a consequence, the farmers of California and Texas immediately improved their sheep, and soon after presented the manufacturers with as good a grade of wool as the foreign, and, after a while, at a much lower price. The hatters were not slow to discover that the Texas wools had as good felting qualities as Cape; and Slater, the once famous manufacturer of broadcloths, became convinced that the finest Texas wools were equally as good for his purpose as the Buenos Ayres wools of South America, for in late years he has been using them to very great extent. But the growth of those wools in California (where lands have run up in price from fifty to five hundred dollars finding it no longer a profitable business. In 1876 the California clip reached 56% millions of pounds, while the past year, 1887, it only reached 36% millions. Now the philosophy of this one fact carries on its face more lucid argument than all the nonsensical twaddle that can be brought forward by the advocates of foreign free wools.

"In Texas the lands are still relatively very low and yet there has been no positive progress made in the growth of wool in year, simply because the everlasting med. dling with the wool tariff admits of no encouragement or prospective security that a flock of sheep or the wool on their backs will be worth as much to-morrow or next week as they would command to-day."

THE FUEL OF THE FUTURE

The announcement by telegraph that the mine operators of the anthracite region propose adding from one to two dollars per ton to the present price of coal is not a pleasant matter for those who must purchase it to contemplate. Still, even at the advance, it is doubtful if there is any other fuel which gives as good returns for its cost as anthracite coal. Its merits are its cleanliness, freedom from smoke and the amount of heat it produces when burning. No other fuel known or in use in any part of the globe equals good anthracite coal. But the question which now confronts the American people is, must they submit to have the price of this fuel advanced whenever the mine operators see fit? And is there no escape from a species of taxation which may become unbearable?

In looking over the question, the various other fuels in use should be considered. months, 17@19c; do 6 to 8 months, 15@17c; Wood, as fuel, is rapidly falling into disuse even in the heavily timbered State of Michigan. Each year sees less of it used while the base-burner with its glowing anthracite is to be found even among the free, 18@21c; Middle Co. spring, 15 farmers who have considerable tracts of @17c: Southern spring, 11@14c; California timber yet standing. At the advance of two dollars per ton, anthracite is a cheape fuel by one-third than wood at present prices in this city. It is therefore out of the question to talk of returning to wood as a fuel because of the cost of anthracite.

Next to be considered is crude petroleum and the various preparations made from it. The lives of people in large cities have certainly been rendered more pleasant to a weather by the use of oil stoves, burning oil, gasoline, or other preparations of the same nature. But the very characteristics which make them valuable in summer unfit them for use during the colder months. They do not give out heat to any extent and hence are not to be considered as practicable for seven months in the year in this latitude. The use of such articles in sufficient quantities to furnish heat would also be very dangerous. But attempts are being made to produce a fuel from crudpetroleum which will be free from object tions, and yet very cheap. Of course crude petroleum is used to some extent now as fuel in furnaces in this and other cities, and a nipe line is under construction from the oil fields of Ohio to Chicago for the purpose of meeting the growing demand. It is said Chicago now uses 2,500 barrels per day, altogether in manufacturing. It costs 15 cents per barrel at Lima, Ohio, and the cos at Chicago is 61 cents per barrel. With pipe line the cost can be reduced one half. The use of this tuel in manufacturing will of course cut down the consumption of coal proportionally, but it will be soft, or bituminous coal, which it will supplant, and it will not, therefore, affect the price of anthracite.

Russian chemists are also experimenting to find some means of using her large stores of petroleum by utilizing it as fuel. They are working in a different direction produce some device which will render the use of petroleum perfectly safe and free from objections. The Russians are working to produce a fuel which can be handled like coal, and available for all purposes One Russian experimenter forms a compact mass of the liquid petroleum by adding to it one to three per cent of soap whilst the being of the hardness of compact tallow-It is stated that the product is difficult to light, burns slowly and without smoke, but develops much heat, and leaves about two per cent. of a hard black residuum. It may be that by some combination with other material, or by some device, petroleum may yet solve the question of providing a cheap and unobjectionable fuel. Bituminous or soft coal is distributed all

over the United States. It is practically inexhaustible. As a fuel it has some good qualities and some very bad ones. It is dirty to the last degree, and a constant source of annoyance to the housewife as well as her "It is true that the fine-blooded South neighbors. Its smoke blackens everything American short wools, like Montevideo or it touches, and it fouls chimneys and stoves, so as to require constant attention. It is cheap, and can be used to advantage in some instances, but it is not a desirable fuel for domestic purposes, at least with the present style of stoves and furnaces. But could not some means be discovered which would do away with its objectionable features? A stove with the principles of combustion so thoroughly utilized as to

now so much annoyance, would do much to enlarge the consumption of bituminous coal, and free the country from the control of a monopoly which may, and probably law, we had to import these grades of wool, will, grow more exacting each year. Can not the great American inventor come to the rescue of the people with a device which will lead to the development of the bituminous coal beds all over the Union, and give Americans a cheap and desirable fuel in inexhaustable quantities?

British Importations of Breadstuffs.

During the six months ended June 30 1888, the United Kingdom imported 40,964, 592 bushels of wheat, sgainst 48,053,484 bushels the previous year and 40,558,323 bushels two years ago, showing a decrease of 7,088,892 bushels as compared with 1887. and a small increase (406,263 bush) as compared with 1886. The imports of flour for the period equaled 22,306,449 bushels of wheat, against 23,249,798 bushels the previous year, and only 17,092,725 bushels two years ago when the quantity of wheat mported was practically the same as this year. The total imports of wheat and flour were 63,271,041 bushels against 71,303,282 bushels last year and 57,651,048 bushels two years ago, showing a decrease of 8,032,241 bushels when compared with last year, and an increase of 5,619,993 bushels over the figures of 1886. The returns show important changes in the sources of the wheat supply. Taking the ercentages of receipts from the three eading sources of supply, the United States. Russia and India, it is found that Russia has risen from 10 per cent. in 1886, and 6 per cent, in 1887, to no less than 34.5 per cent. in 1888; India has declined from 21.1 per cent. in 1886, and 14 per cent. in 1887 to 8.7 per cent. in 1888, whilst the United

Of the flour imported January 1 to June 30 the United States furnished about 77 per cent. in 1886, 85.8 per cent. in 1887 and 83.4 per cent. in 1888. Of the total imports of wheat and flour during the six months, the United States furnished 61.2 per cent. in 1886, 73.9 per cent. in 1887 and only 54.1 per cent. in 1888.

States has dropped from 54.6 per cent. in

1886 and 68.1 per cent. in 1887, to 38.1 per

cent. in 1888, Russia being the gainer in

each instance.

The imports of maize during the six months were 23,690,030 bushels in 1888, against 33,472,632 bushels in 1887 and 31,404,352 bushels in 1886. The largest quantities received this year were 7,353,974 oushels from the United States, 6,855,174 bushels from Roumania, 5,121,960 bushels from Russia and 2,421,582 bushels from the Argentine Republic.

The Company Can Take it if They Have Complied with the Law.

SPEAKER, Mich., July 26, 1888. To the Editor of the Michigan Farmer

Please inform me through your most ing circumstances: A. buys a mowing mathine and gives iron clad notes, to be paid in installments. A. sells it to B. before it paid for, A. telling B. there is nothing against it. Can the company come and take it away from B., he having paid the cash to A. when he bought it? If A. is not worth anything, what can B. do about The agent who sold the machine to A. says they can take it away.

JACOB GRIMES.

The contract of sale, if in the usual form, acts as a mortgage or lien on the property. To make it operative, however, it must be placed on record with the County Clerk. If this has been complied with, the company can take the property wherever they can find it. The party selling the machine under

representation that it had been paid for and was free from incumbrance, renders himself liable to prosecution for a felony. The statute referring to this point is as follows:

Any person who shall fraudulently empezzle, remove, conceal or dispose goods or chattels, mortgaged, leased or let him by any mortgage, written lea other instrument in writing, intended to operate as a mortgage or lease sonal property of another in his posse under a mortgage or contract of purchase not yet fulfilled, and any person in posses sion of such goods or chattels, knowing them to be subject to such lease, contrac of purchase or mortgage, who shall so embezzle, remove, conceal or dispose of the same, with the intent to injure or defraud ssor, mortgagee, or owner thereof which shall be of the value of twenty-five ollars or more, shall be deemed guilty of a felony, and shall upon conviction thereof be mished by imprisonment in the State rison not more than two years, or by fine t more than two hundred and fifty lars, or by imprisonment in the county jail t more than six months. If the property mbezzled, removed, concealed or dispose of, as aforesaid, shall not be of the value of twenty-five dollars, the person thus offend ing shall be deemed guilty of a misdemeanor, and be punished by a fine not exceeding one hundred dollars, or by imprisonment in the county jail not exceeding bree months, or both, in the discretion of the court.

PRESIDENT A. F. Wood, of the Inghan County Agricultural Society, sends us notice of date of its annual fair, -October 10, 11, and 12. The fair is held at Mason, the ounty seat, and the Society has good acommodations for both exhibitor and visitors. L. H. Ives, of Mason, is secretary, and will furnish full particulars on appli-

THE Apiarian department of the State Fair will again be under the superintendence of M. J. Gard, of Volinia, Cass Co., which is a guarantee that exhibitors will be well cared for. It is expected, although this is not a good season for bee-keepers, that the exhibit will be larger and more complete than ever before. The new machine for the manufacture of artificial comb will undoubtedly be on exhibition, and we expect every bee-keeper in the State will want to see something which will revolutionize beekeeping and secure double returns to the apiarists. We know this machine is regarded with suspicion, hence its presence will be sure to attract a crowd of interested visitors. Mr. Weed tells us it will be in shape by that time for public exhibition.

Ilma Ladies' College, St. Thomas, Ontario Three hours' ride from Detroit or Buffalo. Full organized departments in Fine Arts. Music and Commercial Science with Graduating Courses. Diplomas and Certificates granted. The reputation of the school for fficient work is unsurpassed.

The leading Canadian College for young women. For 66 pp. Calendar address, Prin-

NEWS SUMMARY.

Michigan.

The number of sheep in this State is 36,000 ss than a year ago Grard Rapids has 42 furniture factories.

mploying 12,000 persons Albert Tooley, brakeman, was run over by ed injuries which caused his death.

Shelby wants a canning and fruit-drying establishment. Acres of peaches and small fruits are just dying to drop into cans.

A. P. Hascall, of Leroy, Ingham County, els of wheat on 12 acres if it is a poor wheat

W. H. Rayner has given the town of Mason a site for an engine house and council cham-ber, the plat being 22x132 in an excellent lo

No tramps at Benton Harbor. All vagrants are promptly arrested, fined, and made to work out the fine on the streets at the rate of If you want a railroad now's your chance,

The Pontiac, Oxford & Port Au is to be sold at auction on the 8th to satisfy a mortgage of \$1,500,000. It is said the Michigan fruit region never

gave promise of a more bounteous yield than at present. Peaches, apples, grapes, and lackberries are very abundant. The Centre, the prohibition organ of this

State, has been sold by Rev. F. B. Cressy, to W. W. Wise, of Lansing, who, after the campaign, will remove it to the capital. The Toledo, Saginaw & Muskegon railroad vas sold this week to the Grand

Detroit thus secures an air line to Muskegon and a second direct line to Milwaukee. Hon. John S. Gage, one of the first settlers

of Wayne township, Cass County, died this week, at his home near Dowagiac. He had lived on his farm since 1840. The Grand Rapids Telegram-Herald, managed by Fred Berger and Lloyd Bre

aged by Fred Berger and Lloyd Breeze, has passed into the possession of other parties, whose names are not as yet made public. Two thousand G. A. R. men held a reunion at Traverse City on the 2nd, and ten th people came to hear the speech-making and see the boys. Next year they meet at Petos-

Crude petroleum or "fuel oil," is fas coming into favor on account of its cheap-ness and ease of handling. The Fenton flour mills and evaporator works will be run with it hereafter.

Within three miles of Republic, there is a

deposit of mica from which have been taken blocks 3x5 inches in size. Mica mines are scarce and valuable, and the owners of the mine are certain of a fortune. C. Hackley, of Muskegon, who recently

gave the school board the munificent sum of \$100,000 to erect and mair tain a public library, has supplemented the gift with \$25,000 fo the purchase of books. Theodore H. Eaton, manufacturer of drugs and chemicals, wealthy citizen, old resident, and who has been continuously in the same business since 1842, died at his home in this city on the 31st ult. He was president of St Luke's hospital, an institution which he

John Mourer, of this city, who killed his sister-in-law presumably because she told him he could have no dinner unless he paid a board-bill of long standing, now alleges he meant to shoot himself instead of Mrs. Mourer. It is a sad case of poor marksmanship.

The Port Huron Times sent a reporter to investigate the losses by the recent storm in St. Clair County, and the lead pencil man dg-ured up \$30,000 worth of grain and fruits de-stroyed. A number of farmers have abso-lutely no means of sustenance left them. Emancipation Day was celebrated at Flint

n good shape. About seven thousand persons listened to the addresses of Gov. Luce and ex-Senator B. K. Bruce, of Mississippi and in the evening the mayor gave the color ed orator a reception. A logging firm at Gaylord run a specia

over their logging road to take their em-ployes, nearly all Poles, to dinner. On the 30th, when 200 men were on the flat cars coming back to work, the train was derailed, and men and cars piled together by the side of the track. Many had arms and legs broken, or received other injuries, and three were so injured they will die. Fifteen were badly At Reese, a small town located at the june tion of the Detroit & Bay City and Saginaw, Tuscola & Huron railroads, a deposit of soft coal 5½ feet thick has been located 100 feet down. The deposits of coal in Tuscola Co.

promise to be of considerable value to the Saginaws, when once developed, as coal can be sent from that point to the Valley for ley costs \$2.50. Residents of Mackinac Island say they have had all the soldiers' encampment they want. The "soldiers" behaved so disreputably that many risitors descreted the island. This is the general complaint of those residing in

vicinity of the annual encampment, which seems a good deal more like a big lark at the expense than a military The law requiring a license preparatory to the marriage ceremony affords a means by which unprincipled scamps take advantage of the ignorance of girls, who are given the licenses and told they are the certificates of

marriage. A license is a legal permit to marry, but not worth a rap as a certificate. al cases have already occurred where girls have been thus cruelly deceived. T. G. Hail, who has been apparently running the Alpha Oil Works in Sarnia, has been ning the Alpha Oil Works in Sarnia, has been arrested for defrauding the proprietors of a Port Huron hotel out of a board bill of \$200. Mr. Hall claimed to have an idea on the oil question that had "millions in it," and for a time had plenty of funds which he spent profusely. Then the bubble burst, no more money, the works to be sold under a more

gage, and a big board bill to pay. Miss Esther Ford, of Lansing, sister of Congressman Ford, of Grand Rapids, was ouffering from toothache and bought a small the pillow, and on attempting to rouse her found she was dead. She had, it is supposed, inhaled sufficient of the chloroform to make nscious, and had fallen forward up-

Canada exported \$2,717,000 worth of fish to the United States last year. During the month of July 28,690 immigrants vere registered at Castle Garden.

The wheat crop of Central Dakota has been badly damaged by heavy rains and extremely hot weather. In July, over \$14,000,000 was paid out in The public debt was

\$3,500,000 in July. The Connecticut probibitionists have filled out their State ticket on a woman-suffrage, o-whiskey platform.

Bartley Campbell, the well-known play-wright, is dead. He had been in an insane asylum for some time and died there. Sioux Indians remain unmoved in their de-

to settlement by the whites. On Wednesday, 25 persons were prostrated by the heat in St. Louis and five died. The thermometer reached 98 and 100 degrees.

Rudolph Sevic, the alleged leader of the lately discovered dynamite conspiracy in Chicago, has been released on a bond of \$16,

000 to appear for trial. At Cincinnati George Harris was playfully struggling with his sister for the possession of a Flobert rifle when it was discharged, the

all passing through the girl's heart. Twenty-nine thousand, four hundred and

thirty-seven photographs unclaimed, un-tamped, or improperly addressed, were re-ceived at the Dead Letter office last year. E. E. Jenkins left Abilene, Ks., May 16, and

arrived at Boston August 1st. There is nothing remarkable about that, only that the entire distance of two thousand miles was The parish of St. Bartholemy, Berthier Co.,

P. Q., is overrun with grasshoppers, which have eaten every green thing in the country. They even ate the bark from the cedar posts

DETROIT, MICH.

STATE AND DISTRICT FAIRS.

NAME OF SOCIETY.	HELD AT	DATE.	SECRETARY.	POST-OFFICE.
Michigan State Agricultural Society central Mich ag'l Society Eastern Mich Ag'l Society Sortheastern Ag'l Society Sortheastern Ag'l Society Western Mich Ag'l Society Mestern Mich Ag'l Society Indiana State Ag'l Society Indiana State Society Indiana State Society Indiana State Society Mestern Michigan Mestern Michigan Mestern Mestern Mental State Society Mental Ag'l Society Mental Ag'l Society Mental Ag'l Society Mental Ag'l Society Meraska State Society Meraska State Society Meras State Society Meras State Society Method State Society Mest Va M	Ypsilanti Flint Gr'nd Rapids Montgomery, Macon Indianapolis. Olney. Des Moines. Topeka. Lexington Helena Lincoln Elmira Columbus Philadelphia Columbia Dallas Richmond. Wheeling. Milwaukee Guelph, Ont Kingston, On Waterloo, Fd South Bend Oshkosh. St. Louis, Mo Toledo, Ohio Toronto, Ont Lawrence, Ks	Oct. 14 to 19. Sept. 17 to 22. Sept. 17 to 22. Sept. 13 to 20. Aug. 31 to Sept. 17. Sept. 17 to 22. Aug. 28 to Sept. 1. Aug. 20 to 25. Sept. 17 to 24. Sept. 17 to 24. Sept. 17 to 25. Sept. 14 to 19. Sept. 10. Nov. 18 to 16. Oct. 11 to Nov. 31. Oct. 10. Sept. 3 to 7. Sept. 17 to 20. Sept. 18 to 20. Sept. 24 to 28. Sept. 24 to 28. Sept. 10 to 14. Sept. 20. Sept. 10 to 14. Sept. 20. Sept. 10 to 14. Sept. 20. Sept. 10 to 14. Sept. 10. Sept. 20. S	B B Baker Frank Joslyn. Geo F Lewis. James Cox. H C Davidson. E C Grier. Alex Heron. Chas F Mills. John R shaffer E G Moon. Thos. L Martin Francis Pope. Robt W Furnas J S Woodward L N Bonham. D W Seiler. T W Holloway Sydney Smith. A R Venable, Jr George Hook. T L Newton. Henry Wade Jonath'n Davis W H Leas. Chas G Towle A C Austin. Arthur Uhl.	Topeka. Lexington Helena. Brownville. Albany. Columbus. Harrisburg. Pomaria. Dallas. Richmond. Wheeling. Madison. Toronto. Hamilton. Waterloo. M ishawaka. Oshkosh. St. Louis. Toledo. Toronto. Lawrence.

MICHIGAN COUNTY FAIRS.

Armada Ag'l Society Armada Avon Ag'l Society Rocheste Bancroft Union Market Fair Bancreft Brighton Market Fair Brighton Central Fair Association Hubbard Chelsea Fair Association Chelsea Dowagia Union Fair Dowagia Eaton Rapids Union Society Eaton Ra	Oct. 2 to 5 Theo Oct to G J l on Sept. 18 to 20 N M Sept to Oct. 2 to 5 Carl	Armada. Dahlman Rochester. Baucroft. BaltekeBrighton. Campbell Hubbardst'i
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Dowagiae Union Fair		Onn Man Damendan
Taton Rapids Union Society Eaton Ra	de Oot wto 4 HS1	Gerding. Dowagiac.
		Maynard Eat'n Rapid
Pearnaught Driving Park Ass'n Romeo .	Oct. 9 to 12 H S I	Evans Romeo.
Fenton Union Society Fenton	Oct. 2 to 4 W B	lackmore. Fenton.
Radley District Society Hadley	Oct. 2 to 4 M L	Parmerlee Hadley.
lonis District Fair Association Ionia		Smith Ionia.
Milford Union Society Milford.		an Cate Milford.
Northern Mich. Society Greenvil		Merritt Greenville.
Oakland & Wayne Society Farming		(Parmo in out on
Plymouth Fair Association Plymout		Crosby Plymouth.
Petersburg Fair Association Petersbu		amkie Petersburg.
Stockbridge Union Fair Society Stockbrid		Nichols. Stockbridge
Union Ag'l Society Litchfield		Agard Litchfield.
Union Ag'l Society Plainwel		Plainwell.
Allegan County Allegan	Oct to	
Branch County		W Fisk Coldwater.
Berrien County	DO TO TO TO TO TO TO TO TO TO	
Calhoun County Marshall		Cummings Marshall.
Clinton County St. Johns		ett Frink St. Johns.
Raton County Charlotte		R Perry Charlotte.
Gratiot County Ithaca		ackson. Ithaca.
Hillsdale County Hillsdale		Holloway, Hillsdale.
Ingham County	Oct. 10 to 12 L H I	
Kalamazoo County Kalamaz		Kalamazoo.
Lenswee County Adrian .		Mills Adrian.
Lapeer County Lapeer . Lapeer .		Bullock Lapeer.
	Sept to	Midland.
Midland County Midland Manistee County Onekame	Sept. 18 to 20 John	N Brodie Bear Lake.
		Rowley. Mt Clemens
		Monroe.
		Wyckoff. Pontiac.
		Gurney Hart.
Oceana County Hart		
Shiawassee County Owosso.		100 1 100
St. Joseph County		Weaver Watrousvill
Tuscola CountyVassar		H Pond. Ann Arbor.
Washtenaw County Ann Arb	Sept. 25 to 28 Geo	A Tout. Ann Arbor.

Pittaburg, Pa., capitalists have formed a member, "Some one had blundered" at the Pittsburg, Pa., capitalists have formed a member. "Some one had blundered" at the impany with one million dollars capital to evelop a fin mine near Durango, Mexico, in high the ore is said to essay twenty-five to intry-five per cent pure tin, the richest mine in the world.

member. "Some one had blundered" at the member. "Some one had blundered blundered" at the member. "Some one had blundered blundered" at the member. "Some one had blundered blundered

There are less than thirty-five million acres of land in the public domain, that are suit-able for agriculture without irrigation. Cor-porations and syndicates have gobbled milns of acres that will soon be wanted for acal settlers.

Australia, opened with a grand parade and al settlers.

Australia, opened with a grand parade and an "avenue of nations" 1,350 yards long.

an "officer" in the American branch of the Salvation Army is accused of appropriating \$80,000 of the "sinews of war" belonging to the army. He will be "courtmartialed" when "commander-in-chief" Booth comes over to America.

Patrick Gaffney, of Chicago, who died July 19th, left a fortune of \$150,000, which falls to his two brothers and a sister. The latter, a woman 80 years of age, was found in the nospital of an alms-house on Blackwell Isand, in New York bay.

Millions of mather and

Millions of meths, said to be cotton moths from the South, came down upon Raston and Reading, Pa., or the lst. They came in such numbers that they resembled a snow-storm. In some cases two quarts of dead moths were taken from the globes of the electric

De Lesseps still promises the Panama canal shall be completed in 1890. An American who recently crossed the isthmus says the canal looks like a scratch on the face of the carth. The rich tropical vegetation is over-running and filling up the work already done, and according to this authority the whole thing is a stupendous failure.

The jute combine has secured control of mough of the bagging manufactories to make prices. The mills produce about fifty million yards of bagging, enough to cover seven million bales of cotton. The combine has raised the price to 11% cents, which gives them a clear profit of 4% cents bove former rates.

Blinkey" Morgan, sentenced to death for the theft of seven thousand connection with the theft of seven thousand dollars worth of furs from a Cleveland store, and the rescue of McMunn who was arrested for the theft, and murder of Detective Hulli-gan during the fracas, paid the penalty of this and other ortices on Friday morning, ng hung at the Ohio penitentiary at Col-

H. C. BRAINERD, 675 St. Clair St. Wednesday, carried three hundred Italians on Wednesday, carried three number Italians returning to the land of macaroni. Most of them were victims of agents who had induced them to come to this country under representations of plenty of work at high rates. Two Italian bandits were also returned who came WANTED-INFORMATION OF WILLIAM REYNOLDS, an orphan boy. age about 19. Adopted from the Chicago Home of the Friendless in 1880. Anv one having knowledge of his whereabouts will confer a great favor on his sister, Lizzie, by addressing MRS. S. G. CLEVELAND, City Missionary, care of Y. M. C. A., Chicago, Ill. ere a couple of months ago and have been onfined in prison ever since.

Many Italians are found to have been inluced to immigrate to this country through he persuasions of rascally countrymen who guaranteed them work at high wages when they were here. Some of the duped men mortgaged their little homes in Italy to raise money for their passage, and pay 25 per cent interest. Once their money is obtained, the agent has nothing further to do with them.

John Anderson, well-digger, who was imoned in a well near Johnstown, Neb., for e days, and extricated alive, owes his life the days, and extricated affve, owes his fit to the supply of chewing tobacco he had in his pocket. A few drops of water which trickled down to him from above, relieved a title his intense thirst, but he says the wet rag covered with sand which his rescuers passed him, "tasted sweeter than honey."

Bloven Bros., contractors and builders, of indlay, O., who came there four months ago odlay, O., who came there four months ago im Laurenceburg, Ind., "jumped the vn," leaving six unfinished contracts and wn, leaving six unimined contracts and small army of creditors, whose claims agregate \$5,000 or over. The firm collected 1,500 on their unfinished contracts. They overed they were likely to lose on their

ngagements and so skipped out. Hoosiers in the localities in Indiana where "White-Caps"—self organized vigilance mittees—are committing their outrages, we organized to put down this gang, whose ults are quite as bad or even worse than offences they assume to punish. Two ormon missionaries who were terriply whipged on the 28th ult. are under the protection of the backwoodsmen, who don't believe in fair play, not in sneaking assaults and flendish

Last May the government of Peru took forcible possession of all railroads on Peruvian territory for the exclusive use of the beginning by the seizure of the Areulpa, Peru & Casco railroad, 407 miles long, it by Americans, the capital being raised England and bonds guaranteed by the ruvian government. They have included the selzure the private property of John Thorndyke, valued at \$1,000,000, Mr. Thorn-Oke is successor to Henry Meiggs, who was foremost in railroad building in that country. There is an indebtedness of \$12,000,000 existing against the roads the government has so arbitrarily and unjustly converted to its own uses.

There is a good joke afloat on Col. Thomas Bayne, of Pennsylvania, a leading Republisan in the House. He was greatly pleased with Major McKinley's tariff speech, and sent an order for 100,000 copies of it, put up in envelopes ready for mailing. His clerks were at once set to work addressing and franking these for distribution envelopes. ing these for distribution among his ituents and where they would do the most wonstruents and where they would do the most good as campaign documents. Presently protests from his country friends began to come in, demanding why they were receiving Democratic free trade doctrines under the frank of their Republican rebreagation. Well-actoribether the description of the control of the The receiving Democratic free trade loctrines under the frank of their Republican epresentative. With astonishment and hororCol. Bayne investigated the contents of the low enveloped addresses yet unmailed, and lound he had addresses yet unmailed, and found he had distributed a speech by Hon.
Senton McMillan, tof Tennessee, Democratic jly21-Sm

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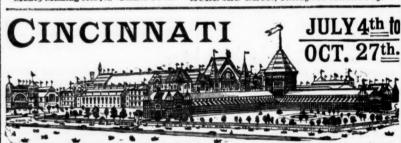


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27-13

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I wish we were hame to our ain folk. Our kind and our true-hearted ain folk, Where the gentle are leal and the semple ar

And the hames are the hames o' our ain folk. We've met wi' the gay and the guid where we've

come: We're courtly wi' mony and couthy wi' some; But something's still wanting we never can find Have you taken that into consideration?" Since the day that we left our auld neebors be-

I wish we were hame to our ain folk. Our kind and our true-hearted ain folk Where daffin' and glee wi' the friendly and free

Made our hearts aye sae fond o' our ain folk. Some tauld us in gowpens we'd gather the gear, So soon as we came to the rich mailens here: But what is in mailens and what is in mirth, If 'tisna enjoyed in the glen o' our birth!

wish we were hame to our ain folk, Our kind and our true-hearted ain folk Where maidens and men in the strath and th

Still welcome us aye as their ain folk. Though spring had its trials and summer its toils And autumn craved pith ere we gathered its

spoils, Yet winter repaid a' the toil that we took, When ilk ane crawed crouse at his ain ingle nook.

I wish we were hame to our ain folk Our kind and our true-hearted ain folk, But deep are the howes and as heigh are the

knowes That keep us awa' frae our ain folk. The seat at the door where our auld fathers sat, To tell o'er their news and their views and a that.

While doun by the kale yard the burnie rowed Is mair to my liking than aught that is here

I wish we were hame to our sin folk. Our kind and our true-hearted ain folk, Where the wild thistles wave o'er the beds o

And the graves are the graves o' our ain folk. But, happy gae lucky, we'll trudge on our way, Till the arm waxes weak and the haffat grows

grey; And, though in this war!' our ain still we miss, We'll meet them again in a warl' o' bliss. And then we'll be hame to our ain folk. Our kind and our true-hearted ain folk,

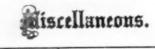
Where, far 'yout the moon in the beavens abou The hames are the hames o' our ain folk. -Scottish American

WHERE THEY GO.

"In court," said the card on the lawyer's door Back in ten minutes," on many more; "Gone to the hospital," on the doctor's slate On another "Sit down and wait;"

"Gone to the bank," on the notary's sign; "Arbitration," that young clerk of mine; "Back soon," on the broker's book; "Collecting rents," on my agent's book.

They were all too busy, a matter quite new Very sorry was I, I had nothing to do: Then I hied me hence to the base ball ground. And every man on the grand stand found



FELICIA.

One sultry evening in August three young neonle were standing talking in a country garden which was as quaint and oldfashioned as the red-brick house to which it belonged. Two of the trio were girls, and the third was a tall broad-shouldered young man clad in a brown velveteen shoot-His two companions were in evening dress, and he was apologizing to them for his morning attire.

"The fact is," he was saying, "I had a lot of letters to turn out and burn; and I thought if I did it to-night I should be able

"I like that old suit of yours, cousin Jack." said the shorter of the two girls; "and, when you return from Australia-a millionaire, sir, or we will not receive youyou are to look just as you do now. You are to wear those old velveteen clothes; and you are not on any account to grow a beard while you are away, or I for one will not speak or even look at you."

"Do listen to her, Felicia!" said cousin Jack, laughing. "Did you ever hear such a young tyrant? Well, Deb, I cannot promise not to wear a beard while I am away, but I vow solemnly not to return with one. Will that please your ladyship?

"Yes. Jack. Remember the reception you will meet with if you break your word; and whether you wear one while you are away or not, I shall always think of you with only a moustache."

"If ever you take the trouble to think about me at all," said Jack, lowering his voice a little and bending his head to see more clearly the expression of the laughing, piquant face which was upturned to his.

Felicia, who had been smiling at their nonsense, suddenly turned away, and walked back with unsteady steps up the broad pathway which led to the house. She assed slowly through the hall and into the drawing-room, then went to the window and looked out. Jack and his companio were disappearing down one of the paths which led into the orchard, and Felicia could just distinguish the outline of Deb's figure in her white dress. The girl sat down by the window and buried her face in her hands.

"All these months," she was thinking "I never guessed! How blind I have been-how blind! He cares for Deb-my

dear little Deb-and I-She must have waited half an hour be fore she heard footsteps coming up the gar

den-path and the voices of Jack and Deb. "Felicia, where are you?" cried Deb, in her clear treble, as they entered the draw ing-room. "How dark it is!"

"Here-by the window," answered Fe licia; and she was surprised to find that her voice sounded quite calm.

"We have a piece of news to tell you Felicia," said Jack, with a laugh, putting his arm round Deb. "Can you guess what it is!" "I-I think I can," returned Felicia, in

a low voice. "Jack is anxious to becom my brother as well as my cousin." "You dear old Felicia!" cried Deb, kit

ing her sister vehemently. How did you gness? I never knew myself till just no

"Lookers-on see most of the gar clared Felicia, trying to speak lightly. congratulate you both with all my

and I hope you will be very happy.

kiss to seal your good wishes!" cried Jack, gaily.

Felicia drew back, pale but smiling. "You must keep them all for Deb now," she answered, stroking Deb's soft little

hand. "We are not going to tell any one else, you know, Felicia, until Jack has made his fortune," remarked Deb confidentially. Grandmamma would be sure to object on the score of my age, for"-turning to Jack

-" I am only sixteen and a half, Mr. Jack Ffolliott-nine years younger than you!

Mr. Ffolliott murmured a few words in a

Felicia rose and left the room hastily-a fact hardly noticed by Deb or Jack, who were too engrossed with each other. Swiftly Felicia fled to her bed room, closed and locked the door, and, throwing her window wide open, leaned out, panting for breath, for her heart was beating so violently that she felt she would be suffocated.

"Thank Heaven," she murmured, "that Jack is going away so soon! I shall get used to it in time. Oh, Jack, Jack!"-and, with a great sob, she turned and flung herself upon the bed, burying her face in the snow-white coverlet.

Felicia and Deborah Ffolloitt were left orphans when mere children, and they had resided with their grandmother ever since. Three years after Jack's departure for Australia Mrs. Gerard, their grandmother, died, and the two girls went to live with a rich widowed and childless aunt. Mrs. Brooke was only too happy to chaperon two such beauties as her young nieces undoubtedly were, for she found that her society was much sought after since their arrival; and Deb and Felicia, having led rather a secluded life with their grandmother, were very glad to see a little more of the world, in which their beauty gained them a hearty welcome whithersoever they went.

Jack Ffolliott met with many ups and downs in Australia, and found that the much-talked-of fortune was not so easily acquired as he had expected. At the end of five years however there came a letter from him to Deb, saying that affairs were taking a turn for the better, and progressing so favorably that he hoped in a few months to return to England, and that he was looking forward to the time when he would be able to claim little Deb for his own. The writer went on to complain that Deb was getting lazy, that her letters were few and far between; he supposed that her time was so taken up with her London triumphs that she could not spare an hour or two to write such long letters as she used

to do.

Deb had changed but little in appearance since the night when Jack had told her of his love. Her figure was more rounded and she was a little taller; otherwise there was no perceptible difference. In Felicia however there was a marked alteration. From slim pretty girl she had developed into an exquisitely beautiful woman, and was as inlike Deb as it is possible for one sister to be unlike another. Deb was small and dark, with large black eyes and a saucy little nose and chin; while Felicia was tall and fair, with a complexion like a rose-leaf, and soft masses of fair hair curling over a low white brow, from beneath which her eyes shone like two great stars. There was a faint trace of melancholy in her charming smile and bright blue eyes, which seemed heighten her beauty and to attract mer in a marvellous manner. Felicia and Deborah had indeed gone through two triumphant seasons, and had rejected numerous offers. Deb was decidedly a flirt; but she had always told Jack of her conquests, and, so long as she could speak openly of them, he did not think there could be much harm done. Felicia never flirted, but men pleaded for her hand just the same, and in vain, for she refused every one in her calm

One afternoon during their second season in town both the girls happened to be at home-a rare occurrence, owing to their numerous engagements-and they were making the most of their leisure.

Felicia was leaning back idly in a com fortable arm chair by the open window overlooking the Park, epposite to which Mrs. Brooke's house was situated; her hands were folded listlessly in her lap, while her thoughts were miles away from London and its busy inhabitants.

Deb was lying on the sofa, pretending to read, but her book was upside-down, she was evidently not very deeply interested in it. Presently she broke the silence, which must have lasted for several minutes.

"Felicia, are you not glad that we refused Lady Lawn's garden-party this afternoon? I declare it is quite delightful to get a few hours to one's self?"

"It is indeed," assented Felicia languid ly, with half-closed eyes.

"Not that I have any right to be lounging here, for I owe at least half a dozen letters," continued the younger sister "Deb, have you answered Jack's last

letter yet?"-" No." "And you wrote only a few lines las

time." "I could not help it-I had no time." There was a rather uncomfortable silence for a few minutes, and then Felicia resumed the conversation by saying-

"Do you know that Captain Wyatt has been here every day this week, and that he s coming with us to the opera to-night?" "Well?" inquired Deb, holding her book so that it concealed her face from Felicia's

"He does not come to see me or aun Catharine."

"I suppose you mean that I-that I an flirting with Captain Wyatt?" said Deb in a strangely unnatural tone. "I might make the same remark of you a propos of another person. Colonel Wolverton has also been here nearly every day this week-or we have met him out-and he is coming wit us to the Opera to-night. He certainly does not come to see me. If you flirt with Colonel Wolverton, why should I not flirt

with Captain Wyatt?" "Deb, I never thought that you would ccuse me of flirting. I never flirted with any one in my life." Felicia paused for a ninute, and then went on, in a low voice "Last season Colonel Wolverton propose to me, and I refused him point blank. I told him"-with an effort-"that I had no intention of marrying him or any one else.

he said as long as I was free he should hope, and it was no use for me to tell him, as I did over and over again, that his attentions were wasted. I should not have mentioned this only I did not want you to think I had behaved so badly. But, after all, Deb, even if I had flirted, you forget that I am free."

"Oh, it is well known that Captain Wyatt is one of the greatest flirts in London!" said Deb, with a mirthless laugh. "He is not likely to come to harm."

"Captain Wyatt, I know," Felicia acquiesced, "is acknowledged to be a tremendous flirt; but the greatest flirts are not invulnerable. Captain Wyatt has not treated you as he treats other women. He loves you: and, when a man of his nature

"I really cannot see what you should know about the state of Captain Wyatt's heart," broke in Deb, in rather an unsteady voice. "Deb, my dear, please do not think that

watch you or try to pry into your affairs, for indeed I do nothing of the kind; but one cannot help seeing what is going on sometimes; and last night, when aunt Catharine and I were waiting for you to finish that waltz, you passed us, dancing rather slowly because of the crush. You said something to him-I do not know what; but it seemed to me that he looked at you in a way that I have never seen him look at any other woman-as a man never does look at a woman unless he really cares for her. Deb, dear-I hate saying this to you, but no one else will say it-I do not think you are behaving honorably to Jack or Captain Wyatt. If you only knew the misery you may be bringing upon both your self and them -

Felicia stopped abruptly, for Deb's book had fallen to the ground with a crash, and Deb herself, with her face hidden in the soft cushions, was sobbing as if her heart would break. The elder sister rushed to the sofa, surprised and distressed beyond measure.

"My dear Deb, what is the matter?" sh exclaimed. "Oh, don't cry like that! I never meant to make you so miserable Cheer up, my pet! I dare say it is all my stupid imagination.

'No, it is not," sobbed Deb; "and I am the most miserable girl in the world-for I love Dick Wyatt with all my heart and soul-I do. I worship the ground he walks Oh, it was cruel to let me engage myself to Jack when I was so young! I was a mere child-what did I know about love? Jack ought never to have let me bind my self to him.

Felicia stood still, bewildered, unable t utter a word. "I tried to tell Dick last night of my en-

gagement," continued Deb; "and, when it came to the point, the words seemed to stick in my throat-I could not utter them. He almost told me that he cared for me; and I-I let him go away thinking that I was free to marry him."

"My poor little Deb! If only your en gagement had been properly announced, all this misery might have been saved. You see even aunt Catharine knows nothing about it."

"If I had thought it would ever have come to this, I would have told Dick long ago; but it has gone on from day to day, and it was only a few days ago that I found we cared for each other. Oh, Felicia, what shall I do?

swered Felicia, sorrowfully. "He will never forgive me!" Poor Del burst into sobs again, and Felicia's eye

"You must tell him to-night, Deb-or I

filled with sympathetic tears. Just at that moment there was the sound of carriage wheels stopping at the door, and the girls heard a double knock.

"That must be aunt Catherine, Felicia, said Deb, getting up hastily.

"Tell her l am lying down in my room with a headache. Oh, Felicia, how shall ! get through this evening? Colonel Wolver ton and Dick are both coming to dinner

"How is your headache, my dear?" asked Mrs. Brooke, as her younger niece entered the dining-room, where they had already begun dinner. "Do you feel well enough

to go out this evening?" "Oh, yes, aunt Catherine-quite well enough!" said Deb hastily, as she slipped into her seat next to Colonel Wolverton after shaking hands with him and with

Captain Wyatt. Deb was rather quiet during dinner, but only Felicia knew the cause, and the others attributed it to her headache. When the two gentlemen joined the ladies in the drawing-room, they found only the two girls thera. Felicia was fastening a creamy yellow rose in her bodice, and Deb was putting on a long pair of gloves that matched

her brocaded amber-colored dress. "Aunt Catherine will be ready in abou ten minutes," said Felicia, "and mean while -- "

"Meanwhile," interposed Colonel Wol verton, who was a tall distinguished-looking man (f about forty with hair already tinged with gray, "Miss Ffolliott, you will just have time to sing 'Eurydice.' No, I am not going to take any refusal; so resign

She went into the adjoining room with Colonel Wolverton, and Deb was left alone with her lover, the curtains which divided the two rooms effectually hiding the two couples from each other.

Captain Wyatt was a tail fair man with bronzed skin, a tawny drooping moustache and intensely keen dark gray eyes; his figure was slim and upright, and he looked a model soldier. He was leaning against the mantel-piece, twirling his moustache and looking down with an amused smile at Deb's endeavors to button her gloves. hands were trembling so that she could not

succeed in fastening a single button. "Allow me," said Captain Wyatt, offer ng his services; and then, under cover of the music, he whispered, "It was very cruel of you not to come to Lady Lawn's garden party this afternoon. You knew I should be there-I told you so last night. What have I done that you should be so unkind?"

her coquetry having vanished; and then she looked up at him, and her eyes were filled Captain Wyatt was overcome at the sight

of Deb's tears, and hardly aware of what

"Captain Wyatt," began poor Deb, all

he was doing, he drew her to his breast and Felicia had grown, and he would wonder kissed her lips.

"My darling!" he whispered. "Deb, do you love me?"

At that moment footsteps were beard choing along the hall; and he had hardly time to let her go before the door opened and disclosed Deb's affianced lover, Jack Fiolliott. Felicia's music ended with a discordant crash, and with a wild cry, Deb staggered and would have fallen had not Captain Wyatt caught her in his arms.

Jack crossed the room. "Give her to me!" he said quickly Dick Wyatt.

"By what right?" inquired the Captain, haughtily.

"By that of her future husband!" an wered Jack curtly; and, without a word, Dick Wyatt put her into Jack's arms.

"Take her into the | brary, Jack," said Felicia, in an agitated tone. "Ask Mrs. Brooke to come down at once," she requested of the astonished servant whom she had immediately summoned.

A few minutes afterwards, when Felicia returned to the drawing-room, she found Colonel Wolverton looking over an album and Captain Wyatt staring mosdily out of the window. His brows were knitted in a dark frown and his mouth was set and stern. He turned slightly as Felicia entered, but it was the Colonel who inquired after Miss Deborah.

"She is better, I am glad to say," anwered Felicia, rather tremulously; "but we had some difficulty in bringing her round. It was a great shock to her-to us all-my cousin's appearance so suddenly. We thought he was in Australia."

"I wonder he did not write to announce his coming," observed the Colonel.

"He did," answered Felicia; "but his letter miscarried. Deb-we never received it. Aunt Catherine begs that you will excuse our going to the Opera to-night; she is very sorry, but of course in the circum stances we are compelled to remain at

"Of course," agreed Colonel Wolvertonwe quite understand. Come, Wyatt-we will not detain Miss Ffolliott any longer. I hope your sister will have quite recovered

by to-morrow. Good-night!" Felicia shook hands with them both; but as she bade good-bye to Captain Wyatt. the expression on his face made her say impulsively-

"D) not be too hard on poor Deb, Captair Wyatt; forgive her, for indeed-"

"Do you think," he interrupted bitterly, that she cares one jot whether she has my forgiveness or not? Let her lover console her. As for me, I will never look upon her face again if I can help it. It is intolerable to me to think how she led me on all these months! Tell her I will banish her from my thoughts as though she had never ex-

Five long weeks passed away, and the announcement of Deborah Fiolliott's enragement to her cousin Jack had ceased to be a topic of interest among her friends, acquaintances and enemies. There was great deal of gossip about her at first, and ome said that, finding she could not se cure Captain Wyatt as a husband, she had taken her cousin, who was far too rich, too handsome, too good for her in every way. There were others who maintained that they had always known it was nothing but a flirtation between Dick Wyatt and Miss Deborah. But, whatever was said of Deb, one and all envied her, for Jack had made more money than he knew what to do with. He was strikingly handome, was still young, possessed charming manners, and, above all, was apparently devoted to his flances.

After her lover's return, Deb went into society more than ever. She was hardly ever alone with Jack; she laughed, talked and danced with untiring zest. But, although apparently in the best of spirits, a night never passed but that she cried herself to sleep. Once Felicia went into her bed-room after their return from a ball, and she found her sister, in her ball-dress, lying upon the bed, her whole frame shaken with sobs. Felicia's heart ached for the girl, for she had experienced it all herself. She drew Deb's head against her bosom kissed her with sympathetic tears, and con

soled her as best she could. "I cannot bear it, Felicia—I cannot bear it! Oh, his scorn seems to stab me; and he looks so worn and haggard and miser able! He has kept his word, Felicia-oh yes, he has kept his word!-and he would sooner die than break it. He has never spoken to me since that night or touched my hand; and, if he looks at me, scorn is expressed so plainly in his eyes that I writhe beneath their gaze. He gave me just such a look to-night-I cannot get it out of my head. I wish I were dead!"

Felicia did not know what to say, for, be tween her love for Jack and Deb and her sympathy with Dick Wyatt she felt utterly

Jack Ffolliott too was restless and dis atisfied. He was dissatisfied with Deb and himself. She was not looking well and was not at all like herself; and, though ap parently lighter-hearted than any of the other girls he met, there were times when he felt certain that she had been crying, and that all her gayety was assumed in order to hide an aching heart. She was always sweet-tempered; but he noticed that she tried to avoid being alone with him and had never once since his return offered to kiss him of her own accord. There was subtle change in her manner which almost convinced him at times that her heart was no longer his. One thing Jack became cognisant of was that Captain Wyatt had ceased to be a visitor at Mrs. Brooke's house, although, as he had learned, the roung officer had been formerly a frequent ruest. Jack also noticed the studied and persistent manner in which Wyatt and Deb avoided each other when they met by acci dent. Coupling this with the fact that the Captain's behavior was rather peculiar at their first meeting, and even allowing for his natural astonishment at beholding an apparent stranger claim Miss Ffolliott in so familiar a manner. Jack at last came to the onclusion that there was something radically wrong. His own feelings too seem ed to have undergone a change, and he felt angry with himself because the warmth of his old love for Deb seemed to be coeling down into a calm cousinly affection. He frequently found himself thinking

whether she was going to marry that fine looking fellow Wolverton. At this stage of his thoughts, poor Jack would shake himself with a sigh, as he remembered that he was still engaged to Deb. and that everything seemed upside-down.

The Goodwood Races were close to hand. and the Lendon season was nearly over, when a triffing occurrence convinced Deb's fiances that there had been more than friendship between his future wife and Captain Wyatt. As Jack was coming out of the Opera-house one evening, with Deb on his arm, Captain Wyatt ran against them. Turning, with a smile, to apologize for his clumsiness, be caught sight of Deb. and the smile at once left his lips. Jack felt the girl's hand tremble on his arm, and when he looked at her she was deadly pale. The young fellow instantly formed a reso lution, which he afterwards kept.

The next evening Jack received a message to say that Deb had such a bad headache that she would be unable to go to Mrs. Danver's "At Home," and would Jack go with Mrs. Brooke and Felicia, or would be go by himself later on? He sent an answer saying, that he would go alone,

Mrs. Brooke and Felicia had just left the ouse, when Mr. Ficiliott's name was announced to Deb, who was lying on a sofa. "Don't let me disturb you, Deb." he said. "How is your head?"

"It is rather bad," she answered, fee! ing vaguely surprised that he only shook hands with her.

"I want to speak to you about something, Deb. Do you feel well enough to hear a little conversation tonight? I should not ask you, but I so rarely get a chance of seeing you alone.'

" I am well enough to hear anything you like to say, Jack." "Do you know we have been engaged five ears?" he began abruptly.

She started, and her cheeks flushed vivid "I know," she said in a low tone "Do you not think it is time we were married?" he asked, regarding her intent

"If you wish," she faltered.

"And you will marry me when I like?" e went on mercilessly. "Yes, when you like," she answered

softly that he had to stoop to catch her words. He laughed a melancholy laugh, and stood ap suddenly.

'Deb, my dear," he said. "I am no

oing to ask any such sacrifice at your hands; and I came here tonight to tell you that I release you from your engagement to me. You are free to marry whom you

Deb could restrain her tears no longer, and Jack drew her head against his shoulder in quite a brotherly fashion and let her ery on.

"You poor little Deb!" he said, stroking her hair gently. "You know, my dear, that five years ago you and I made a great mistake; but I was far more to blame than you, for 1 was years older. I must have been mad to allow a child like you to engage yourself to me; you were far too young to know your own mind. I want to emedy the wrong, and see you look like venr dear bright little self again. Give me your confidence, my dear, and tell me. Did you and Wyatt care for each other?"? "Yes," she whispered faintly.

"I ought to have found out from your letters that you had ceased to care for me. I shall go away tomorrow and you must lose no time in announcing the fact that our engagement is at an end. will come back in time."

"Never!" sobbed Deb; and then she told im all that had passed between Captain Vyatt and herself.

'He will not listen to a word of explanation-he returned unopened a letter l wrote to him. He told Felicia that he never wanted to see or speak to me again-I made her tell me."

"That was in the excitement of the mo ent; he will forgive you in time."

'Never!" repeated Deb, hopelessly. Well, I must be off. Mrs. Danver is a elative of Wyatt's, is she not?"

"Yes; and that is partly why I did not vant to go tonight." "At what time shall you go to bed?" "I shall not go till aunt Catherine and Felicia return; they said they'd leave early.

Besides, of what use is it to go to bed when I only lie awake?" "Well, dear, I hope you will not bother about me, for, if it will make you any happier, and if it will ease your conscience. I will tell you something-I love you still, but only as a cousin. Good night, dear. Pre-

pare yourself for good news." About half past ten Jack returned to Mrs. Brooke's house, and this time he was not

"She is in the drawing-room, Wyatt," he said to his companion; " and I shall give you only half an hour, old fellow;" and with that Jack opened the door, peeped in to make sure that Deb was still there, and then, giving Wyatt a gentle push, closed the door after him, and strolled off to the

billiard-yard for a smoke. Dick Wyatt stood still for a few moents, and looked at Deb with sorrowful eyes. She was lying back in an arm-chair. where, worn out with crying, she had fallen fast asleep. He saw there were traces of tears on her cheeks, as he crossed the room and knelt down by her side. Then he took her little hand and pressed his lips up-

She stirred uneasily in her sleep, and, with a long-drawn sigh, murmured-

" Deb?" he said softly.

Have you come back to reproach me? Then she opened her eyes, and looked at him, half dazed and terror stricken. Her breath came in quick short gasps, and the next moment she found herself in his arms. and her face was being covered with kiss-

"My poor little darling, what a brute have been to you!" "But you forgive me now, Dick?" "It is I," he answered, "who ought

ask forgiveness. How Jack had gone to Mrs. Danver's how he had met Wyatt and insisted on peaking to him, how well he pleaded Deb's cause, how they left Mrs. Danver's and you really love me, Jack, or is it only came straight to Park Lane—all this Deb Pity?"

"There is only one answer to that," he

content with knowledge that Dick still loved ber. Nearly an hour had passed when Jack

entered the drawing-room with much rattling of the door-handle. "Well," he cried cheerily, " and have

you two people come to your senses at last?" "I do not know what you have said to Dick, to bring him to his," said Deb

calmly. "Put before him the advantages he would lose if he continued to be a lunatic," replied Jack laconically. "Deb, I hear your aunt's voice in the hall. How early they have returned! Are you not frightened, my dear?"

"Oh, what will aunt Catherine Hide me, somebody!" cried Deb. "Let me hide your face on my shoulder,"

uggested Captain Wyatt. "Shall I go and explain, you ard?" asked Jack, laughing.

"Please do, dear Jack," if you do not mind." "Yes, please do, dear Jack,"

Wyatt, with a cheerful smile. At this they all laughed, When Jack did explain, all that aunt Catherine said

"Well, of all the little windmills I ever net-" She did not finish her sentence. but went off to congratulate her wayward

Felicia had stood silent all the time that Jack was explaining the state of affairs to his aunt, and she did not believe for a mo-

ent that his gaiety was genuine.

"He is simply acting a part," she thought. to hide his misery;" therefore, when Mrs. Brooke left the library, and Jack gave a sigh, she felt convinced that it was a sigh of regret for Deb. But Jack had completely forgotten Deb at that moment, and was anxously watching Felicia unbuttoning her glove. She was standing beneath the chandelier, and the gaslight was shining upon her fair hair, making it look like burnished gold, while her milk-white throat and arms were set off in vivid contrast by the soft clouds of black net of which her dress was

Felicia raised her eyes and Jack sighed. He was wondering how he could have been so blind, as the truth suddenly dawned upon him that he loved her.

"I am an unfortunate fellow," he thought for it would be absurd to expect her to care for me after all that has passed." But his face expressed nothing more than friendliness as he turned to her, holding out his hand, and said-

"Good-bye, Felicia. I am going away tonorrow for a month to get over it!"-with a smile. "I do not suppose I shall see you again before I go."

"Good-bye," she returned composedly; and he did not know that her every pulse quickened as he held her hand for a few noments. "We shall have left London by the time you return," she went on, raising her sweet grave eyes to his, "and we shall probably be at aunt Catherine's place in Bedfordshire-Buxton Hall." "I have promised to be Wyatt's best

an," said Jack, "so I shall be back in time for the wedding-till then. Felicia, good-bye. "Good-bye," she said again. eruel of Dick Wyatt to ask Jack to be his

best man!" she thought to herself. Four months had passed since Deb's marriage with Captain Wyatt, and they were Hall was full of visitors, and among them

Felicia could not understand Jack at all; for one minute he would be brimming over with high spirits, and the next him that her identification of him would no depressed beyond measure. That she herself had anything to do with his uneven temper she had not the faintest idea. She

attributed it solely to his loss of Deb. One day Jack came down stairs whistling. apparently in the best of spirits; but, as he entered the hall, he saw Felicia warming one foot on the fender and talking to Colonel Wolverton, who was also a guest in the house. Without a word Jack seized his hat and opened the hall door. It was raining

hard. "Where are you going in this horrid

weather, Jack?" asked Felicia, turning around quickly. "Oat," replied Jack brusquely-almost udely. "Ask aunt Catherine not to wait dinner for me;" and he was gone.

said Felicia, with a sigh. By the end of the following week all Mrs Brooke's visitors had departed, excepting lack. One evening, when Felicia went in to the library to fetch a book she had left there, she found her cousin standing with his hands in his pockets gazing moodily out

'I did not know you were here," sh said, endeavoring to speak composedly. only came in for Temple Bar." She took the magazine from the table and was going out of the room but Jack

"Wait a minute, Felicia-I want to tell you something. I had a letter from Australia this morning. My old schoolfellow and chum whom I lived with out there has written to try to persuade me to go back again." He paused, not daring to look at Felicia again for fear he should lose all control over himself and say something wild-perhaps tell her that he

"Yes; I have almost made up my mind to go next month. The fact is. trying to talk cheerfully, "I have been away so long that I feel lost here. is no one here who cares for me enough to mind whether I go or stay." " And do you think," cried Felicia wild ly, "that because Deb was so blind others are also? Oh, Jack, I love you!"-and

"And-and you think of returning?"

then the pent-up tears gushed forth, and she tried to rush from the room, but Jack caught her and held her tightly in his strong "Let me go, Jack!" she cried. "What have I said? Oh, let me go! I did not know what I was saying, Jack; I did not

mean one word!" Instead of letting her go, however, Jack only tightened his arm about her.

"Thank Heaven, Felicia, for those words," he whispered, "for I should have gone away without speaking! I thought, my darling, that you loved Wolverton."

"Oh, Jack," she said, as he kissed her sweet lips, "I feel so ashamed—I shall never dare to look you in the face again." ed his arm about her.

to look you in the face again! How could I-how could I?" But you meant it, Felicia! You care whether I go or stay? "If you go," she answered, "take me too!"—and, after a par

never dare

Laughable Incidents That Occur Centers of Money-Handling. No one would imagine, to glance grave-faced business the tellers and cashiers of banks. had, during working hours make merry. Yet, it seems that th share of fun even in the midst of their mes important duties.

FUN IN A BANK

Do funny things occur around a ba said one of the gravest-looking in the Park Bank the other day. should say so. Most people ha that there is nothing exc and commonplace in the bank but they are altogether wrong. the funniest scenes I ever w pened right here in this bank. Years ago a man call Jim Simpson, because that name, was one of the depositor. a character. He kept a out of the city, and did a brisk h was a Yorkshire Englishm and over six feet high, with a rud

deposit his receipts of the week, oft or \$300. Well, he invariably went the same performance. Stand near the teller's window he would his big pocket-book, draw out his and begin counting them over, leaving the ones, twos, fives and tens each pile. Then he would pick up the five them crosswise of the tens, again, put the twos across, go thr same process until he satisfied h his count was correct. It often to fifteen or twenty minutes to get his money arranged in shape for depositing.

"One day, when he had an unusually lar amount of money spread out before him stranger entered the bank, walked up Jim without saying a word, nudged ; man with his elbow, and pointed to the floo under the desk. The old fellow supposed of course, that he had dropped a bill, an stooped down to look for it. Quick as a flas the other man swept the pile of bills of the desk, crammed them into his pocket and was out in the street before Jim had time to straighten up. He looked around, saw the retreating stranger, then looked at the play where his money had been, and broke in foud and hearty laugh. Well, I'll be hanged said he, then laughed more noisily

was going on, and we had no idea what the old man was laughing at. I never saw a person more amused than he appeared to be He haw-hawed till the walls fairly echeed It was some time before he recovered his rred. He was so greatly struck with the

and years after three-dollar bills ceased to be issued. He kept some Government bonds here and came around at regular in-tervals to request us to 'cut off them there cowpens' for him. "You have read, perhaps, of the country man who bought a draft to pay a note which was about due at some bank in a distant city t the paper in his pocket, imagined is to be a receipt, and only dreamed of his matake when he received notice that his not was about to be protested. I have known

says he does't know them.

" Do you mean vaccinated? he asked to laugh. 'Bring some body here that k you are the person named in the check. W can't pay money to people we don't know "The man departed and returned in about fifteen minutes accompanied by his wife He seemed heartily surprised when I told be sufficient, and that he must bring son body who was known to the pe

happened to drop in and I got rid of my troublesome visitor "I have seen men get polite request that they man

pieces of paper instead of cash.
"There are any number of pe times. I think, as many as nine who seem to think it no crime to chest bank. If there is a streak of meanned anywhere in a man's nature it will crop ou when he is put to the test on a que money. Sometimes I have amused my Whether they were honest. There is a easy way of ascertaining. For instance, depositor hands in his bank-book, togethe "He has never been the same since his with a number of bills and checks engagement with my sister was broken off." amount of which is to be placed to hi

> "He has made out a deposit ticket, which certained the amount to be. If the man is honest he will say that he thinks I am misaken; but often he will turn around and make out another deposit ticket, fixing the mount to correspond with the figures have given. Then, of course, I count the cash again and announce that I have made mistake, and to prove it hand back the noney and let him recount it. Men whom nobody would ever suspect of crookedness are often very quick to take advantage of a little mistake in their favor. I know ser eral wealthy gentlemen who I truly believe would never think of paying any sum, large or small, that got into their hands through

The Good Old Times. A gentleman who resides in Bath, Ma,

The time occupied was 14% days and the listance traveled was 2,400 miles, an average of about seven miles an hour.

"nest" lost him an increase of \$100 on his salary next year. When he sent his rein he lacked 31 cents of the amount called for by the law to permit an adjustment of his salary. His reports showed the yearly receipts of his office to be \$2,099.20. As the department allows a fraction over a half dollar to be counted as a dollar, the post master would have been \$100 more in pecket if he had had shrewdness enough to buy 31 cents' worth of stamps out of his own pocket. Since he sent his report he has learned his mistake, and every body is the county now can kick him. His was the only case of the hind in the 2,500. It caus much merriment among the clerks at the

and keen, twinkling eyes.
"Jim used to come in every Saturda

"None of us in the bank had noticed what

gravity sufficiently to explain what had o ridiculous nature of the trick that had been played upon him that he seemed to regard t as more than an equivalent for the money he had lost. " Another man who used to have an a count here, whenever he drew any money always asked for 'small bills, twee at threes,' and he kept up the practice year

just such cases myself. But people may loke as they like about the country folks; had much rather do business with the than some of the smart city men who is agine that they know every thing and seen to think a cashier is woefully ignorant if he

An amusing thing took place in our hand A laboring man had beet given a check by a well-known contracte and came in to get his money. I told him he must be identified. The man started, at having the faintest idea what the work

bank. After I had wasted half an making explanations the maker of the

checks, meanwhile denour man who paid his debts with worthle

he holds in his hand while I count the money. 'How much?' I ask. 'What do you make it?' he inquires. I name a sum fire dollars or ten dollars larger than I have se-

recently gave the item of a trip to Peoria Ill., which he and his wife took thirty-five years ago. The same trip can now be taken in two days from Portland at an erpense of about thirty-five dollars. Bath to Portland (stage) tland to Boston (boat).... on to Pittsburgh, via raffroads and steamboar ittsburgh to St. L. Louis to Peoria.

Ignorance Kept Him Honest A story is told of a postmaster whose lack of knowledge of working his

BECAUSE I LOVE YOU.

"I can not bring you wealth," she said; can not bring you fame, or place meng the noted of the race; But I can love you.

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I can be sunlight to your feet: ous lips shall greet. when daylight dies along the west,

And I shall sleep upon your breast. off sickness comes, beside your bed I will bend low with quiet tread,

And pray God's blessing on your head, Because I love you. As dew clings to the violet Making the fragrant chalice wet,

Only myself, my ak. I bring: But count it, sweet, a precious thing To give my life an offering, Because I love you

Because I love you

So my life into yours is set,

n how before no other shrine: If I go first across death's line I will return to claim you mine, Because I love you. -Sarah K. Bolton in Home Journal

MAKING FIRE-WORKS

The Process Described by an Ar-

gus-Eyed Correspondent. Wow Roman Candles Are Constructed-

Balloons of Various Shapes and Sizes-Catherine Wheels and Other Grotesque Devices.

It would seem to many that the manufactof fire-works is a simple and easy matrites a correspondent of the Albany Arous. But as no machinery of any kind is esed the manual work necessary makes it much more laborious than where all the ess is performed by perfected machinery. A knowledge of the laws of chemistry o essential. In order to give the reader some idea of the process let us select the Roman candle as the most ordinary of fre-works, and follow it in its journey from room to room and from building to building.
The first department we enter is that where the cases are made. This is done in the following manner: Cartridge paper is cut into the length and size required and laid on a marble slab, where paste is spread e does not get on the side touching the round which the paper is wrapped, for if the roller is wet it will teal drawing it out. This roller is s or wood and the case comes off it as though it had been made from paper of one thickness, although every boy who has dissected a Roman candle knows to the contrary. After this operation one end of the case is closed. An expert work-man can make from fifteen hundred to three thousand a day of these, acng to size. After rolling the cases are ced on shelves and sent to the drying room be thoroughly dried. In this same department is a machine for trimming off the gh ends so that the possibility of any acent happening from unnecessary friction dessened. These cases beside being used filling have also various other purposes, such as mailing, etc. While the Roman e is progressing thus far on the journey let us peep in at the laboratory door, ere chemicals are being mixed. The performance of the principal part of fireks depends much on the composition being very fine and well mixed; therefore at care is taken in this part of the work and particularly for the composition of sky. rockets and also in all fixed works from which the fire plays regularly. The chemical mixtures are then distributed to the rkmen, who in turn take them to the ulding room, where with little manipula they are placed in moulds and made into ars" or "balls" as they are more commonermed. These are all colored, for the pale ite lights have given place of late years

stars, red from gray, and so on until every color of the rainbow is catalogued. It is at this point where we meet the case again ready for the reception of the chemicals thus prepared. This is called the charging department. Before the workman is a frame capable of holding twelve es upright, which he places in position, having first ascertained that the insides are entirely free by passing a rod through them. This precaution is necessary because any obstruction would cause the piece iss fire. On one side of him, in arate compartments, are clay, composition, er and stars of various colors, and on other a mallet of considerable weight and several rammers of different lengths, longest being about the same size as the ase he is to fill. Taking in his hand an inrument consisting of twelve small scoops, nnected in a line and exactly the same ance apart as are the cases on the frame, fills them with clay and skillfully apties them into these cases. The same Is done with the powder, the composition (which is used as a wad) and the stars. All ese he then packs down by means of the longest ramrod. Repeating the same process again and again, except the clay is nitted, he uses a shorter rod each tame ntil the case is fully charged, and pours in at the end more clay, as this material guaratees safe handling and packing and pron inserted and lastly the outside colored paper is wrapped around for beautifying the Roman candle thus made. The whole peration described here also applies to

those of beautiful tints. The color of the

ers seen in this department would deceive

Fire-crackers come from China, where e country people manufacture them as a stime, as the Germans do toys. They ported in boxes similar to tea chests, e hieroglyphics on them representing adrtisements of different firms, and they used as ballast for the ships that bring n over. An idea may be obtained of the impossibility of competition when one formed that it costs but two cents to ke a pack of fire-crackers there. The hinese were acquainted, as we all know, ith the uses of gun-powder long before its atroduction into Europe in the thirteenth entury, and the peasants have been for so y generations adept in the art of makfire-erackers that it has become, we t say, second nature. Of course, in he fire-works, where a thorough under-tanding of the mysteries of chemical ion and artistic skill are required, those anufactured in Brooklyn are a fair aple of the higher excellence of American ductions. But when neither of these es is requisite we are entirely out of

oons of various sizes and shapes are also made here. Passing through this de-artment a predominance of the fair sex mong the hands is noticeable, which is acd for by their superior deftness, ess and accuracy in cutting and ag. The devices in use for balloons very amusing, often grotesque, senting figures of almost every al, from the elephant to the frog, also several fishes, some gigantic It looks ludicrous to see a huge le or a mammoth pig rise in the air and acefully float away. But the most strik-g of all seen in this department are the rted Japanese bomb-shells. What kes them still more wonderful is their significant appearance before being fired, ring to be about the size of a baseall, but much lighter in weight. When wan from the mortar, however, to a con-rable height, they suddenly burst, and, a shower of falling stars, a large,

beautiful figure, made of Japanese paper, sails far away. The effect is brilliant and unique. Another interesting thing of this kind is the bomb-shell upon which the company prides itself. It consists of shells made of different sizes, so as to fit one inside the other and to contain colored stars. As the whole affair flies upward, one after another of these shells bursts and produces a long train of variegated stars, which, in turn, shoot off and burst until the entire heavens is illuminated.

Besides those already mentioned, there are many other forms of fire-works, such as Catharine wheels, tourbillions, girandoles, pastiles and a variety of the rotating and ascending kind that produce the most pleasing scenic effects.

THE PAWNBROKERS' TRADE. One of the Lending Clerks Tells of Strange Things He Sees.

There are two sides to a pawnbroker's counter, says the New York World. On one side there is always to be found a well-dressed man with an air of perfect coolness about him and a tone in his voice that the experienced know. If that voice says "22" there is no use arguing with him to make it \$2.50. To the other side of the counter there come all kinds, classes and conditions of men, women and children. The only bond of union that touches these people is that they are human and all need money. The miseries of those who go at certain stated times to this counter are well known. There are to be found the well-to-do temporarily embarrassed, the once affluent reduced to poverty by some bad turn of the wheel of fortune, the wild individual who is always "broke," the poor who go regularly to pledge some little article until the weekly pay comes in, and the impecunious young man who has squandered his week's earnings in a night and must live somehow until the next pay-day.

All of these people are well known, but the man on the other side of the counter is e stranger to every body. If his own brother comes in to raise a little money on some valuable, the face of the man behind the counter never changes, and his answers would be just as brief and emphatic and that tone in his voice would sound just as unchangeable as though he had never seen the person before. This man behind the counter is a character. At no other occupation are the popular requirements here seen needed so much. Behind his counter he is not like any other mortal alive. He is dead to sympathy, oblivious to pity and can not be insulted.

Recently a reporter met one of these seemingly heartless men away from his counter and he appeared to be one of the most genial and gentle of men. His brevity and stoicism he had either left behind in the cash drawer or had put a ticket on and stored until his return, and he willingly consented to tell a very few of the things he sees and explain his position on the other side of the counter.

"A clerk in a pawnbroker's shop," he said, "is always thought to be hard-hearted, fond of taunting the poor with whom he deals, and is frequently accused of refusing to give a fair amount on some article of value; but such is really not the case. Why, bless your heart! because we handle money and make loans people seem to think we loan it out because we don't know what to do with it. This is a mistake. only working for our employer, and are often strapped ourselves. I know what it is to go to some rival pawnshop and raise on my watch, and it is no fun. They say that we are hard-hearted, but such is not the case. I often get blue at seeing so much misery about me, and when some young fellow comes in with the signs of lissipation about him and offers for a loan a watch which, by the inscription, is a gift from his mother, I would, if I dared, try to help him, but I can not. I have seen little girls with wan and pinched faces bring in the last household god that she might get something to eat. If I dared I would give her more money than the article was worth

"There is another caller, and that is the temporarily embarrassed man who has it in his power to soon arrange matters and redeem his pledges. I do not waste any sympathy or sleepless nights on him.] uld surprise you if I gave you the name of some of our customers. The people we see most are the sporting men who have made some unlucky venture and have to e as to that which they display when fired.

The green produce a blue light and the blue raise what they ca They always redeem promptly, but to green. White is made from red we have them sometimes as often as twice a week. I have in my ten years' experience behind the counter loaned money to lawyers, preachers, actors and merchants. I have seen society men and broken-down inebriates stand in adjoining boxes.

"We have some queer experiences at times and are placed in situations that require all of our coolness. About a month ago a fashionably-dressed young woman came in to pay the interest due that day or a diamond ring which she had pawned a rear before. I calculated the interest and she was about to hand me the money when a well-known lawyer—quite a society man, too, by the way—came in to examine some goods before he bought the ticket. I saw he young lady turn pale and knew some thing had gone wrong. The lawyer raised his hat politely, and did not conceal his astonishment when he said: 'Why, Miss --what are you doing here? Can I do any thing for you?" When he called the young lady's name I knew it at once, and so would you, and I saw that I had to get the girl out of a scrape somehow, so I just called her familiarly by her name, which I had heard the lawyer use for the first time, for people rarely give their real names when they pledge articles, and asked her to step into he private office and I would show her the goods she had asked about. She was clever and took up my cue at once, and said: I thought of buying a diamond ring. It is such a lovely thing and so cheap. combined stroke of diplomacy saved her. I showed her her own ring. She looked at it, admired . and said she would call the next day and get it. I put it to one side and the next day she came and paid the interest.

"There is not a day passes but I see some people meet in the shop who would have given almost any thing if they could have prevented it. Yes, we have some very funny things offered. I remember one that a cowboy brought in a scalp-a relic, he called it-but we declined the loan. It has got so now that almost every body carries some article of value in case he runs

During the last few years the number of pawnbroking establishments has greatly increased in number, and it is a paying business. The rates of interest are simply mormous. It is very rarely that any thin like a decent value is given for an article pledged. It seems to be an unwritten law that one-fourth of the actual value of any pledge is all that any one will offer, and in cases where the pledge is not redeemed the pawnbrokers sell the article for its value and obtain a handsome return.

Five Thousand School-Ma ams. New York City has in round numbers 8,100 women teaching in its public schools. Brooklyn has 1,600 women teachers. Here is a colony of 4,700 schools-ma'ams training the young ideas of the two cities. Add a second colony almost if not quite as large for teachers in private schools, kindergar tens, academies and institutes of all sorts not connected with the public system, and for teachers in convents, orphanages, asvms, etc., and you have the makings of a thriving city which might be founded with the women engaged in this one calling. Male teachers are, so far as numbers go, in an insignificant minority. New York has 222 and Brooklyn has 66 men employed in the public schools. Ninety-three per cent. of New York teachers and 96 per cent. of those across the bridge are women.

At a Lottery Agency. To Clerk—"Did you ever realize any thing in the German lottery!" "Yes, sir. I tried five times, and realized that I was an HIRSUTE ELECTROLYSIS.

Destroying Hair by Means of a Needle The method of destroying hair follicles in the pores of the skin by means of a needle heated to incandescence by an electric current after insertion, has, says the Electrical Review, set many a woman rejoicing in the annihilation of mustaches of various degrees of visibility, or perhaps in the path made between meeting eyebrows, or even in the destruction, root and branch, of a stubborn tuft of hair growing from cheek or jaw like sedge grass in a field; and she has thanked electricity for the removal of at least one incubus to beauty, doubtless re-lating in confidence the depiliatory experience as one of the wonders of that "great

But is it truly a wonder when a white-hot platinum needle in res out the root of the hair that it kills the tain? How could it be otherwise! "What is to hinder?" as the man said when called upon to admire the Falls of Niagara as a great wonder of nature. And he gave a description of his idea of wonder that the water should flow up the stream and ascend the falls.

In this case the method used would be

much more truly wonderful if the dermatologist should reverse the action of his apparatus and raise a capillary crop ad libitum. As Carlyle says: "Instead of carrying the torch for burning let him wield the hammer

Picture to yourself a gilded youth sitting in an operating chair like those in tonsorial emporiums, having side whiskers or mustache germinated according to the whim of the hour, while there could be a resurrection on the shiny occupits of those whose foreheads extend pretty well toward the spinal column.

If Captain Gulliver, of blessed memory,

gave as his judgment that the man who caused two blades of grass to grow where one grew before was worthy of the prize offered by the King of Lilliput, how much more shall be the reward of those who cause spears of hair to grow where none grew before-that is, since before the war. As the locomotive has not dispensed with the service of horses, so the second form of this apparatus would not obviate all needs of its present application. For, in addition to the purposes before alluded to there would still remain men desiring more or less of a beard removed, yet not wishing either to shave or to be shaved, and then there would still be those desirous of posing as a phrenological phenomenon, who would have the area of the forehead en-

larged accordingly.
All these matters furnish a promising. field for those who can reverse the action of hirsute electrolytic process, and raise capillary crops. The field may not be entirely overrun, for there are everywhere persons who, like the knight in Hudi-

Can discern and divide The hair 'twixt south and southwest side, and some may yet have their old preferences for hair-cut and shave, while others may be so lost to youthful vanity as to preserve their denuded scalp in all its present

MONODY OF A PEN.

The Affecting Plaint of a Castaway with an Eventful History.
I'm but a worn-out fountain pen, my useful days are o'er; so badly battered up am I they've slung me on the floor, begins the poet of the Boston Transcript, who in this instance represents the worn-out fountain pen. A writer's hand has wielded me for more than half a year, and now that I can mark no more. I'm lying sadly here. The tor may come, perhaps, and claim me for his own, or with the other waste and truck perhaps I may be thrown; and of the millions in the world, not one in all the men will ever give another thought to this old fountain pen. The man who used to write with me, before he'd start to think, would rudely twist me all apart and chuck me full of ink, and then I'd scratch along and tell of some bright youthful bride, wh wed the only man she loved, serene and oyous-eyed; and of her dress and of the ouds that decked her flowing hair, and of

the words the parson said about the "happy And then I'd glide along the page and leave the letters bold, to tell how some one gathered in a wondrous pile of gold, and all the other little things that go to make a day, and now that all my work is done I'm calmly slung away. I've told of births, I've told of deaths, of joy and dark despair; I've told how vagrants are run in, how dudes oil up their hair; I've quoted Latin, French and Greek, bad English I have known, I've treated of the loud guffaw and likewise of the groan. I've helped to kick when days were hot, as when they were too cold: I've run in lines from chestnut poems as when "the knights were bold;" I've told how in some lonely grave the clammy earth was flung, I've shown how some at eve have wept, how some at eve have sung. How Richard Ros got thirty days for going on a drunk, how Paddy won a slugging match because he'd lots of spunk; how some one, smiling, took a gun and aimed it at a friend, and in a jesting, joking way, brought one life to an end. Of how the smiling servant lit the fire with kerosene. and swopped her apron for a robe where fires are never seen; of how some stumbling feet went down toward the burning bars, while others clambered up the road that leads toward the stars. I've told of human misery, of human grief as well, of musty tiasks of ancient wine, and buckets in the well; of gray-haired men and women old, of happy girls and boys, of groans and smiles, of prayers and thanks, of sorrows and of joys; and now my point is worn away, I'll scribble never more, but lie alone, a broken

THE RETORT COURTEOUS. Why It Is Not Wise to Give Away Your

wreck, upon the office floor; and those

who've read of all I've told, in all the ranks

of men, will give but little credit to this

busted Fountain Pen.

Wedding Presents. When a sister of the Governor of a neighboring State was married, a few years ago, says the "Topical Talker" of the Pittsburgh Dispatch, she received a great many valuable presents, and among them were many pieces of plate and silverware of all sorts. But particularly was she overwhelmed with silver fruit spoons. Beautifully chased, gold-lined, in every sort of variety, were se spoons.

After the wedding, and when they had re-turned from the honeymoon, the bride found that she had no immediate use for half the silverware she possessed, especially as for the time they were to live in her mother's house. So she consigned some of it to the care of a Bank in town. The fruit spoons all went to the vault.

A few months later she received an in-A few months later she received an invitation to attend the wedding of a school-mate in a neighboring town. She knew she would have to go to New York to buy a suitable present and she didn't care about fating the journey just then.

All at once the idea came into her head

that she had a great superfluity of fruit spoons. Why should she not send some of them to her schoolmate for a present? There seemed to be no objection, so she sent the butler down to the bank with orders to pick out a pretty case of spoons. The butler fulfilled his mission. None of the presents were ticketed, so that it was altogether impossible to tell from whom this

particular set of spoons had come. The spoons traveled once more to the hymeneal altar, and the lady who sent them heard nothing about them for several days. Then she received the following letter: DEAR MADAM: I am very grateful to you for returning the spoons. I thought they were too good for you when I sent them to you as a wedding present, and it is honest for you to send them back.

Yours, etc.

It is not wise to give away your wedding

HEROINES OF TO-DAY.

What Some Plucky Women Have Done Within Our Own Borders, When Thomas Hardy's novel, "Far from the Maddening Crowd," was published, Bathsheba was recognized as a heroine of new and fascinating quality, says the New York Graphic. Bathsheba was beautiful, managed her

own estate, went to market, danced her samples of grain up and down in her own white hand, and of course won the hearts of all the squires with whom she bought and According to the Western papers, Bathshebas are as common as silver mines in the Territories. From timid, half-scared

girls, they become cattle queens, landlords, great farmers, mighty hunters, enter politics; in fact do whatsoever their fance pleaseth them and without losing any of those womanly qualifications which make them attractive to the men of that country. These general assertions come backed u by special instances. One such is a Wes ern girl who took up a homestead claim in

Montana, and extended it in time to the limited 640 acres, and went to sheep-raising. This prospered to such an extent that ah sent East for a brother to be her overseer. Meanwhile other matters were progressing. On the next ranch was a young bachelor, also a sheep-raiser. It seemed easier these two to use one brand than two, so they joined flocks and hands, and the sh now run in happy harmony over a farm of 1.280 acres.

Then there is Miss Catherine Wilkins. of Idaho, whose father gave her a colt when she was a baby. Kitty is now of age, and the start that colt gave her early in life ha made her the owner of nearly one thousand head of blooded horses, besides a large herd of cattle. Miss Kitty now employs thirtyfive herders and cowboys, besides keeping a general oversight of her wealth herself. Another woman, Mrs. Ira McLane, bid for a number of Montana mail contracts and got them. These contracts run through

a populous, but rough country, but there seems no doubt but that the plucky Mrs. McLane is going to succeed. A Chicago saleswoman is another of the Montana heroines. Going to Bozeman as a school-teacher she eventually announced herself as a candidate for county superintendent, and was elected over her competi-

In fact, neither sex, race, nor previous condition of servitude is any bar to a woman in the West. The Garfield lode, which is one of the promising mining properties at Yago, is owned by a negress, Millie Ringgold, who has a reputation as a wise pros pector in the mining districts. Millie is one of the pioneers-she washes, keeps hotel and handles her pick and shovel like a man. Her successful location and purchase of mining properties, it is believed, will yet

make her a mining queen.
Life in the West brings out all the sterling qualities of a woman. A woman beng to one of the best known families in town, gay and pretty, a belle in her circle, went with her husband as post trader to a far western fort. Leaving the fort they became ranchers. They had a large family of children and generally no servant. She cooked, sewed, taught her children and enertained hospitably. A blizzard descending at the lambing season, she rode twelve s by night with a cowboy to the herding ground in a buckboard, carrying blankets and bottles, and worked with the herders to save the flock. The united efforts were unavailing. Thousands of dollars' worth of cattle were destroyed that night. The family returned to this country and this brave lady is again a woman of fashion and easy hospitality.

ALLIGATOR PLATT.

Some Tall Stories of an Ancient Florida Hunter and His Game. Among one of the oldest and best-known of 'gator hunters in South Florida is the in dividual who earned the sobriquet of "Alligator Platt." He was a terror to the saurian ribe, says the St. Louis Globs-Democrat, and what he didn't know of these ugly-looking reptiles and their habits, haunts and species amounted to very little. Platt was a me dium-sized man, rather slim, with the genus "cracker" written all over his jolly face. He generally dressed in an odd fashion, with pantaloons made of dressed alligator-skin, and a hunting shirt or coat of panthersirin beautifully tanned. He was a queer genius, and always delighted in some dare-devil act that would make the natives talk about him.

Joshua and Peace creeks, in Manatee County, were his favorite grounds, as alligators were very numerous there. It is related of him that his favorite methods of capturing the saurians were as follows: Stealing along the bank of the creek, he would watch the water closely for any sign of his game. Probably he would soon tice the air-bubbles on the surface that denoted a 'gator's presence, and then he would sink behind something close to the water's edge and await developments. Soon the black snout of the gator would rise up slowly and cautiously, hardly raising a ripple. Then his eyes would appear, and, if the coast was clear and he scented no danger, his entire body would rise into sight, and he would float on the water. Then Platt's opportunity would come. He would rise to his feet, doff his coat, and as the startled 'gator would sink the hunter would dive head first. Soon the waters would be stirred up and a wild commotion would show that a great combat of some kind was going on down there.

In a few moments Platt would appear, riding triumphantly the big 'gator, which he would guide to the shore, where it would be dispatched. When once he had gotten his thumbs into the 'gator's eyes all was plain sailing, and the new and novel steed would be gentle and quiet as a donkey.

Platt is also accredited with the feat of going into the 'gators' "front door" in their big mud-holes and dragging them out without so much as saying "by your leave." While all this is doubtless remains of his exaggerated camp-fire stories, yet it is said that he was utterly fearless, and that in his combat with the 'ga tors he would display what would seem foolhardiness to those not so well acquainted with the reptile's habits. He has en known, time and time again, on wagers, to dive into small ponds where 'gators wer known to be, armed with only his big hunting-knife, and kill one before coming to the surface-generally by getting under them and slitting up the belly, or else driving the knife up to the hilt in the brain, just back

of the eves. The daring old Nimrod has long ago abandoned 'gator-hunting, and is now en-joying life on one of the keys near Key

Underestimated His Friends. A candidate for office near Salem, Mass. was elected by a small majority in a small poll. His supporters called on him, agree-ably to a general invitation, to tender their congratulations. He employed a caterer to erve a lunch, instructing him to provide for a number equal to all the votes he re-ceived. About four times as many came, and in his speech of welcome he said:
"Gentlemen, I had an idea that my election was a mighty tight fit, but I should judge from the number present that I was chosen

unanimously!"

The strange habit of an aged Albany woman of using the rural cemetery for a dormitory on special occasions has, according to the Albany Journal, come to light. The woman in question is a widow named Briggs, whose husband died about eight years ago and was buried in the cemetery. For some time she has been in the habit of making two-day pilgrimages to her husband's grave. She always carries with her a sufficient quantity of food to last through her vigil, and blankets to serve as a cover-ing during the night. She claims that she spends the night in converse with her departed spouse.

VARIETIES.

THE NEW AMERICAN.

In the prisint hot dissinsion ye obsarve misap In regards of workin' rackets in the comin' fall campaign,

And some fellys do be claimin' that they sartihave the namin' Of the kind of sort of sthoyle of man the Oirish

vote to gain. Thin some fellys do be shoutin' and some pa pers do be spoutin'

That they have the very candidate and hav the noicest plan,

Wid a platform smooth and aisy they will knock all others crazy and will gather in the franchoise of the hones

ye notice, too, thim fellys wid the large bay

windy bellies. and a mout' like Harlem tunnel and a coppe

bottomed t'roat, That sthand bladyin' on the corners that they understhand the for'ners And can calculate exactly pwhere to place the

Begorra, I've a notion when I kem across th For to grow up wid the counthry and me brand

new life began; When I kem widout a farden t'rough the gate of Cashtle Garden, bekem a redhot Yankee and a bould American so, me wily politician, ye'll be wastin ammuni

tion Av ye's go to feedin' taffy to the Oirish or the

We're Americans to day, sir, wid a moighty big broad A, sir, and we vote from morn to eventide without Judge.

LIFE IS SO LONELY .- "Yes," he said, "lif s so lonely."

"It is lonely sometimes," she answered. "Wouldn't it be sweet to have a little oot age covered with ivy and honeysuckle and rose bushes?"

"O! wouldn't it?" "And when a fellow came home tired from business to have a nice little wife meet him at the door with a kiss."

" Y e e-s." "And then the summer nights, the win dows open, the subset just giving light enough in the cozy parlor, and-you-I mean a wife at the piano suging in the gloaming. It would be lovely."

"I-think-it-would-be-nice." "And then-"

At this point a careworn woman camaround the corner with a pair of twins in perambulator. A dead silence fell upon the summer air for a little. Then they changed the subject .- San Francisco Chronicle.

Two Kinds of Soureze .- "James." said the father of the family sternly, "your school reports have been anything but favorable this term. I suppose you failed in your examination as usual?" "No, sir," protested the boy. "1 passed

but it was a tight squeeze.' "Laura," continued the father, turning t his oldest daughter, "I think I heard voices in the hall late last evening. I have told you repeatedly not to let that young man stay

later than 11 o'clock." "It was just 11 o'clock when he left, "That's so," testified James, coming to the

relief of his sister. "I was at the top of the stairway and saw him go. He got away at 11 o'clock, but it was a tight squ-"James!" shrieked Laura.

MOTHER-Why deesn't Dr. Brown come to

see you now, Carrie? Daughter-I can't tell, ma. He came thr lights a week up to three weeks ago. Then he suddenly stopped coming.

Mother-Did you say anything to him that could offend him. Daughter-No. On the contrary, I was more tender and affectionate on the night of

his last call than I had ever been before. fact I called him a duck. Mother (in a harsh, grating voice)-

what? Daughter-A duck.

Mother-I am not surprised that he hasn called. My child, when you are receiving the attentions of a physician you cannot be too careful in the selection of terms of endearment. Remember that there is an intimate relation between a duck and a quack.

A GENTLEMAN accompanied by a lady wear ing a handsome dress and bonnet, came out of a concert hall one night to find it raining while they were without umbrella or water proof clothing.

"Why, Charles," the lady cried, "it's rain

"So I see," said Charles, calmly.

"Why, what shall we do?" "I rather think we shall have to let rain," replied the matter-of-fact husband. Excited by: the disaster awaiting her gar ments, the lady amused the bystanders great ly by saving:

"Why, Charles, how can we, when I have on this light dress and bonnet?"

"Young MAN," said the solemn-faced ger tleman to the urchin who was puffing with all his might at a cigar, "let me warn you in time that that is a frightful vice you are cultivating."

"I ain't scared of it." "But are you not afraid of bringing your poor father's gray hairs in sorrow to the

grave?" "No, I ain't." "Why not?"

" Because papa's bald headed."

ENCOURAGING TRADE .- Uncle Rastus (to Postmaster)—Has yo' got enny letters fo' me, boss? Postmaster-Nothing to-day, Uncle Rastus

Uncle Rastus-No postal-kiards, or stamp or nuthin'? Postmaster-No; were you expecting to near from somebody?

Uncle Rastus-No, I don' expec' te her from nobody, sah, but I was parsin' by an' thought I wud jess step in an' patronize de

INQUISITIVENESS REBUKED .- Officer-Look a here, you! What are ye doin' 'round here this time o' mornin'? Stranger (boldly)-I'm tendin' to me biz ness! Wat yer s'pose?

come from? Stranger (with more under his coat, sav agely)-It come from a neg, av course! What'n blazes did yer tink it come from? sody-feuntain?

Officer-Oh, ye are! Where did that chicken

PHOTOGRAPHER—The likeness is excellent but I am afraid the expression is too sad. We had better try again.

Customer-No, no. The expression is all right. I have been practising on it all the forenoon. I am to send the picture to my wife, who is visiting in the country, and it wouldn't do to have anything hilarious about

Ethan Alien, the soldier. "I say, old fellow,"

said the Kentuckian, "we think a mighty Economy, Exactness and Carefulness heap of horses in Kentucky, but we have never erected a monument to a dead one

First Irishman-It's all pinsion, pinsion nowadays, Molke. The papers say there's a thousand survivors of the Mexican war, with twelve thousand widdies, afther drawin' pinsions this blessed day!

Second Irishman-The owld Marmons! Twelve widdies to every one o' them! That's pwhat becomes uv the surplush!

Clark-"Well, I will declare! Smithers, how you have picked up lately." Smithers-"Yes, yes; things were bad enough with me a little while back, but I happened to run across the advertisement of B. F. Johnson & Co., of Richmond, Va., and they put me in a position to make money right along. If you know of anybody else needing employment, here is their name and address.'

Chaff.

Eternal vigilance is the price of keeping a

Teacher-What is the plural of child? Boy (promptly)-Twins.

What is the worst kind of fare a man car

Why is a widow like a gardener? Because she tries to get rid of her weeds.

Why is a man wearing a hat not paid for like a bankrupt. Because he is ever head and ears in debt.

It is perfectly astonishing how long a bost can stand on the starboard tack without showing any sign of pain. Women are now wearing undressed kid

for their slippers, yet for ages they have been wearing their slippers on the undressed There never was a woman yet who ever

bought a box of berries from a hawker with-out calling from the window, "Are they good?" A Boston correspondent writes: ' want to know what kind of fruit an axle-tree bears. Why, nuts of course; one on each end of the tree.'

She-How do you like my new shoes, Adolph. He (dreamily)—They are simply immense. It took the two families a week to patch up a peace.

At School—Teacher: "A reptile is a little creature that creeps on the ground. Who can tell me one?" "Please, teacher, my litle sister!

Teacher (to class)—In this stanza what is meant by the line, "The shades of night were falling fast?" Bright Scholar—The people were pulling down the blinds. When a New Englander who had been accustomed to washing sheep first looked upon the Falls of Niagara, he exclaimed: "What a

place to wash sheep. Clara—I had such a pleasant call last night from Mr. Paperwate, Ethel. It was fully 12 o'clock before he could tear himself away. thel-I hope his coat didn't suffer, dear.

The pin factories of England, France, Holland and Germany are said to turn out 76,-000,000 pins daily, but nine times out of ten a man has to pick all the stuffing out of a pin-cushion before he can find one.

Edison is tickled to death with his new

baby. He is new engaged in perfecting an attachment to his phonograph by which he can bottle up the youngster's squall and dump it an hour later two blocks off. This is the toast which the modest Irishman

This is the toast which the induces trishman:
"Here's to you as
good as you are, and here's to me as bad as I
am; but as good as you are, and as bad as I
am, I'm as good as you are as bad as I am." "I never pass that house across the way," remarked Dunley, "that I do not see that pretty little woman on the lawn. She must spend most of her time there." "Yes," replied Brown, "she does; she's a grass wid-

Mamma-Charles, dear, what are those two pages of names on the first part of your magazine? The list of subscribers? Charles who has just started a new monthly magazine to fill a l. f. w.)-No; those are the edi

Lady (to floor-walker)—I want to look at something handsome in the way of striped silk stockings. Floor-walker—Yes, madam. (To saleswoman)—Miss Parker, will you show this lady, that new line of windy-weather "Death is a sad thing," he said to a man

who stood weeping at a grave. "Ah, yes,"
was the broken reply. "Are you sorrowing
over the death of a very dear friend?"
am sorrowing, sir, over the death of my wife's
first hustand." He (10 p. m., and the lamp turned lowhumorously—it isn't at all queer, is it, Rdith, that one should find electric kisses when he goes "sparking!" She—Yes, queer, indeed, Mr. Standoff, when the lady's nega-

tive is positive. The man who was convulsed with laughter at a woman trying to sharpen a pencil, was soon after discovered trying to cut a paper pattern by the united efforts of a pair of scis-

sors, his right hand, lower jaw, and two thirds of his tongue. A little girl out visiting was given the album of family photographs to look at while the hostess attended to other affairs. "Well, dear," asked the latter on returning, "did you look at the album?" "Oh, yes," anwered the little maid brightly: "and we've got one 'zactly like it, only the pictures are

Some one sent Henry Ward Beecher on a Ist of April an envelope inclosing a sheet of paper, on which were only the words "April fool!" "Well," said Beecher, "I have several times known stupid people to write a letter and omit to sign it; but this is the first time I ever knew a man to put his signature on the paper and forget to write the letter.

NEW ADVERTISEMENTS.



FOR CLEANSING, PURIFYING AND BEAUtifying the skin of children and infants and
curing torturing, disfiguring, itching, scaly and
pimply diseases of the skin, scalp and blood,
with loss of hair, from infancy to old age, the
CUTICURA REMEDIES ARE infallible.
CUTICURA, the great Skin Cure, and CUTICURA
SOAP, an exquisite Skin Beautifier, externally,
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DRUG AND CHEMICAL CO., BOSTON, MASS.
Send for "How to Cure Skin Diseases."

Baby's Skin and Scalp preserved and beautified by Cuticura Soap.

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TF You want to know all about the Garden, address PETER HENDERSON & Co., 35 and 37 Courtland St., New York. m17 46t

THE other day a Kentuckian, who had beard a good deal of Ethan Allen, the race-

horse, was at Montpelier with Colonel George W. Hooker, and saw the equestrian status to

Every farmer should have the means of weighing his preduce before he sells it, and also what he buys has a matter of economy there is nothing that with pay him better. The high price of scales prevents many rom providing themselves with them, and they are thus at the mercy of every dishonest party-they may do business with. One of the very best makes of scales now on the market are those manafactured by the Chicago Scale Co., and for the benefit of those who read the FARMER we have arranged with that company to supply orders sont tbrough us at a great reduction. The prices are so ow that the saving of loss on a load of wheat, pork, wool, poultry or butter, will pay the entire cost. Just look at the prices below and judge for your



reighs from 1/4 pound to 900 pounds. Size of p atform 17 by 26 inches. Price \$18 00, and Michigan FARMER one year, With wheels \$2 00 extra: or \$20.



weighs from one pound to 6,000 pounds (8 tons) Price \$35, and MICHIGAN FARMER one year:



weighs from two pounds to 10,000 pounds (5 tons)

sze of platform 8 by 14 feet. Price \$48 50 and MICHIGAN FARMER One year. In ordering, give the number of scale you select. Nos. 2 and 3 will faclude the beam, box, and fall directions for setting up; either of these scales can be used for hay, grain, coal, stock and merchan

dise, the only difference is in the platferm. All will be boxed and delivered at the depot Ohicago without extra charge. Every scale will be perfect and will be so guaranteed by us and the manufacturers, and the prices above are only onehalf or one-third the usual prices for the same article. To get the scales at above prices of course the money must be sent to us, and the sender must become a subscriber to the FARMER.

Address all orders to GIBBONS BROTHERS.

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Passenger station foot of Twelfth St. Twee
the Wabash Short Line to Chicago and the West.
Standard time. A AFRIYO. Wabash & Western Flyer. 8:30 s.m. Cincinnat Express. \$11:20 p.m.
2:00 p.m. St. Louis Limited Express. Adrian & Butler Accommodation. Chicago & Cincinnati Exp. \$6.15 s.m.
8:1. Louis and Westers Ex. 9:50 p.m. | press | §11:20 p §Daily. *Except Sunday. ;Except Monday.

MIGHIGAN CENTRAL

The "Niagara Falls Route." Depot foot of Third street. Ticket offices, at Woodward avenue, corner of Jefferson avenue, Merrill block, and at depot. All trains arrive and depart on Central Standard time.

Chicago Trains.

 Day Express
 *9.10 a m

 Kal. d: 3 Rivers Accom'n
 *4.00 p m

 Evening Express
 \$8.00 p m

 Pacific Express
 \$10.15 p m

 Kal. & 3 Rivers Accom'n \$4.00 p m
Evening Express. \$50.0 p m
Pacific Express. \$10.15 p m
GRAPO BAPTOS TRAINS.

Day Express. \$0.10 a m
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Night Express. \$10.15 p m
Night Express. \$10.15 p m
Alpena and Mackinaw. \$2.25 a m
Night Express. \$11.00 p m
Night Express. \$11.00 p m
Night Express. \$11.00 p m
Bay City Express. \$10.00 p m *6.45 p m *11.50 a m *6.00 a m *9.10 p m \$11.00 a m *6.05 a m *5.35 p m

Bay City Express. 9.00 a m TOLAND TRAINS. Southern Express. 58.25 a m St. L., Cin., Clev. & Col's \$2.45 p m Grosse Isle Accomoda'n *4.40 p m Toledo Express. \$7.30 p m Cincinnati Express. 9.55 p m Canada Division

Buffalo and To-Leave, going east. from east Accommodation.......*5.00 a m *8.00 p m Atlantic & Pacific Exp. \$6.10 a m \$9.40 p m \$9.40 p m \$9.60 p m \$1.00 p m \$1

Arrive

CHAS. A. WARREN, City P. & T. Agt, Nov.20, 1887. Detroit. Chicage, In. Lake Shore & Mich. Southern R'Y.

Trains run on Central Standard Time. The 6:25 p m train will arrive, and the 2:15 p m train depart from the Third street depot. Other trains will arrive and depart from the Brush street depot. The 2:15 p m train leaves daily; all others daily except Sunday. Up-town ticket office No. 66 Woodward Ave. cor. Jefferson, Merrill block.

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Depot foot of Brush Street. Trains run by Central Standard Time. In effect May 1, 1888.

Depart. Arrive.

*Morning Express... 6:50 a m *12:00 n'n *150 pm *150 pm *16 pm *150 pm *16 pm

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Storing the Potato Crop.

J. M. Stahl, in the New England Farmer, says, for the benefit of those who raise large crops of potatoes:

The quicker ripe potatoes are out of the ground the better; and if the ground is dry I would not hesitate to dig the potatoes at once, though the weather was warm. The tubers can be kept better out of the ground than in. If left in the ground and there are heavy rains, the potatoes are apt either to rot or to make a second growth, while they will not come from the ground so clean and will be more disagreeable to handle and not so attractive in market. In clay soils, po tatoes not dug as soon as ripe are apt to rust. So my advice is to dig the potatoes as soon as the vines are quite dead though it is yet early in August.

The potatoes must be thoroughly dried, but they must not be allowed to get warm. I have known growers to lose hundreds of bushels by exposing them to a hot midday sun. Make in a convenient location a shed open at all sides, roof of boards, or branches or straw, supported on forked stakes driven in the ground. This shed is easily, quickly made. It should be high that it may be airy. In its shade put the potatoes as soon as they are dug. Spread them out as well as you can. By putting each bucketful at a different place until all the heap has been gone over, and then beginning again as before, the potatoes, from dry ground, will be sufficiently dried before they are covered so deep that the hot, dry air can not reach them. When dry they may be transferred to bins in a well-ventilated building or shed, there to remain till they are put in the cellar or in plts at the near approach of cold weather; or they may be put on the floor, provided the floor is raised some inches from the ground and they are not placed deeper than eighteen inches upon it, the place being dry, airy and dark always. Or they may be taken to the cellar at once if it is quite cool and dry and well ventilated, if they are thoroughly ripened and dried, and if they inary surgeon to examine the animal and are put in bins raised on legs eighteen inches from the floor and made, sides and bottoms, of slats, and not more than eighteen inches deep.

Potatoes dug later, when the weather is cool, may be put in convenient, regular heaps, on some high, dry point; first covered with vines or straw to a depth of four to six inches, and then with earth six inches deep, well compacted and smoothed and pointed with the back of the shovel, that it may shed the rain well. In this condition the potatoes may be left until the nearness of the season of severe weather warns that they should be pitted or stored in the cel-

For winter storage I prefer a cellar that is dars, well ventilated, and that can be kept just above the freezing point, using the slab bins previously spoken of. I think it highly important that the potatoes be some distance from the floor and not stored deeper than eighteen inches. Some prefer the pit to the cellar, and there is no doubt that potatoes can be kept in the best condition during the winter in a pit. The pit should be located on high, dry ground. Not more than a hundred bushels should be in one pit'and it should be twenty feet long. Plow a strip four feet wide and twenty feet long, throwing the furrow outward. Then shovel loose dirt and level the surface. Build up the potatoes in a sharp ridge run ning with the slope of the land. A coat of straw may be placed next the potatoes, but it is better to cover the potatoes with earth six inches deep first, and then use the straw. The reason of this is that the stray hence it is better to have dry earth next th potatoes. Make the covering of the potatoes deep enough. The only safe plan is t cover for a very severe winter. After freez ing weather comes give an outside coverin of coarse manure, straw or fodder.

Peterinary Pepartment

Conducted by Prof. Robert Jennings, Veterinary Lurgson. Professional advice through the columns of the Michigan Farmer to all regular subscribers. The full name and address will be necessary that we may identify them as subscribers. The symptoms should be accurately described to ensure correctiveatment. No questions answered professionally by mail unless accompanied by a fee of the dollar. Private address, No. 201 First St. stroit. Mich.

Morbid Secretion of Saliva in a Colt, with Enlargement of the Salivary and

ARMADA, July 31, 1888.

Veterinary Editor of the Michigan Farmer. I have a three-year-old colt which has always been kept on grain, and this spring l turned her out and took the grain from her. She caught some cold and had what one verzinary surgeon called epizootic. Her throat swelled quite badly. He prescribed mustard and vinegar, and left me some condition powders to give her. She got better throat is quite full yet and it bothers her to breathe or swallow. The fullness is immediately back of her jaw and in the throat, and there are a couple of lumps ower down between the jaw bones. When I put the bit in her mouth the saliva, or some stringy substance, runs from her mouth. Now what can I do to reduce her throat to its natural state and keep that substance from running from her mouth?

Answer-The term epizootic is not limited to a single disease, but indicates all diseases arising from atmospheric causes, extending over an extensive district, affecting all animals predisposed to its influence. If we understand this case it appears to be a complication. The enlarged gland in the throat is probably the thyroid, which when chronic is known as goitre. Or it may be due to inflammation of the parotid glands extending from below the ears on either side downwards, which when inflamed from abscesses, is relieved by the discharge. Linseed meal poultices hasten the development. The salivary discharge from the mouth is probably due to imperfect dentition. The age of the animal indicates the shedding of the molar teeth. Examine the mouth well as to this condition. If a temporary tooth is loose, it is but a shell, the root having been absorbed; knock it out. It sometimes may be removed with the fingers. The accumulation of saliva may arise from other causes, as from an injury in the mouth, or from similar causes. Some years ago we were called to see a mule which for two weeks had not eaten a month ful of food; on examining the animal we found that the trouble had been caused by a piece of corn cob wedged between the upper molar teeth. Its removal restored the masticating apparatus to its normal condition,

when recuperation was rapid and complete in a few days. The proper manner of examining the mouth is by means of a gag made for the purpose. Your ingenuity may suggest a temporary gag which will answer the purpose. Cuts, splinters, scratches or wounds in the mouth from any cause increase the flow of saliva. As we are in some doubt as to the cause of the profuse salivary discharge, we would advise you to call Dr. R. L. Parkin, of Romeo, to examine the animal.-VET. ED.

Bursæ Mucosæ in Hock Joint of Three Months Old Filly.

HIGHLAND, July 25, 1888.

eterinary Editor of the Michigan Farmer. I am a regular subscriber to the Michi-GAN FARMER, and ask for a cure for my colt—a bay filly three months old, sired by a trotting stallion. This filly when but a few days old showed a puff or soft swelling in front of left stifle, but was not lame, or not much if any. Applied tineture of iodine to the soft puff for a few times. The puff is not so large as it was; but have done nothing for it for some time. Now the cap to the stifle seems to slip to the outside of the leg, and the filly is quite lame. Does not run and play any more. The stifle seems to be sore to the touch, at least does not like to have it handled. When the cap, as I call it, sips off, by pressing one hand to each side of the stifle the cap can be pressed back to its place, so it will look natural. As this i quite a valuable filly would like to cure it if possible. Please answer in next FARMER as she is getting worse all the time

Anguer -The description of the hock oint in your filly indicates a disease known to the profession as Bursa mucosa, or mucus sacks about the joints, probably the result of injury in foaling. Such cases require prompt attention of an experienced practitioner. The application of irritants in such cases is antagonistic and calculated to cause induration and sometimes ossification (bony deposits) which in the stifle joint more particularly are to be avoided. We would advise you to call a competent veteradvise treatment.

Goitre in a Stallion.

PIONEER, July 31, 1898

Veterinary Editor Michigan Farmer. DEAR SIE:-I have a valuable stallion seven years old, who has two lumps, one on each side of the windpipe, caused by epizootic. They have been there two years and seem to be growing. They affect his breathing. They are about as large as hen's eggs and are perfectly loose under the skin, and can be moved about. Please answer in the FARMER what will remove them. Can they be cut out better than to use outward applications? If not, what will be the best to apply?

H. BARTHLOMEW.

Answer. - The enlargements in the throat of your stallion indicate a disease known as goitre, a morbid enlargement of the thyroid gland. They may be removed by means of the knife in the hands of a skillful surgeon. As the operation is a dangerous one it is seldom performed, the enlargements rarely causing any inconvenience to the animal. In the colt they are sometimes removed by the use of tincture of iodine, or

Commercial.

DETROIT WHOLESALE MARKET.

DETROIT, August 4, 1888. FLOUR .- Market quiet and unchanged

Quotation Michigan		1100	- 4	-	-	-							A	133	624	2
Michigan	DA	ter	ti	8.									 4	70	@4	7
Minnesota	LI	180	e	ra Br									 4	15	@4	74
Minnesota Minnesota	LE	ate	91	181	8.		. ,						 4	75	@4	
Rve													 8	45	@ 3	
Low grade	8.												 2	40	@ 3	9

WHEAT .- Receipts of new wheat are increasing, and business is largely confined to t. No. 1 white has declined about 2c from a week ago, and No. 2 red has advanced about that much. The week closes with rather a depressed tone, but red grades and futures are higher than a week ago. Closing quotations in this market yesterday were as follows: No. 1 white, 87%c; No. 2 red, 85c; No. 3 red, 81c. In futures No. 2 for August delivery sold at 863/4c; September at 871/4c, and December at 89 1/2c. No. 1 white for August delivery sold at 87c, and No. 3 red at 81%c. The market closed weak.

CORN .- Dull, and slightly lower on spo No. 2 quoted at 46%c for spot, and 39c for

December delivery. OATS .- New No. 2 white selling at 31c for spot, 28%c for August delivery and 28%c for September. No. 2 mixed at 27c for spot, 25%c for August delivery, and 25%c for Sep

FEED.-Bran quoted at \$12 75@13 # ton and middlings at \$13@16. CLOVER SEED .- Prime for October deliv

ery quoted at \$4 25 \$ bu. RYE.—Quoted at 47@48c * bu. in car lots BUTTER.-Market dull except for choice Fancy lots dairy sometimes bring 17c, choice 15@16c, and fair 13@14c B D. Creamery quiet at 18@20c W D.

BARLEY .- No. 2 nominal at \$1 25@1 30 bu., and No. 3 at \$1 10@1 15. None offering CHEESE.—Now quoted at 929%c for full cream State, 9%@10c for New York, and 82 8%c for Ohio. Skims quoted at 528c. These are jobbing prices. From first hands prices

are %c lower. EGGS.—The market is steady at 151/4 for fresh receipts. Demand only fair.

FOREIGN FRUITS .- Lemons, Messinas, box, \$5 00@5 25; oranges, Messinas, \$6 50@7 00 9 box; cocoanuts, 9 100, \$3 75@4 25; bananas, yellow, W bunch, \$1 25@2 50. Figs, 14@ 15c for layers, 15@16c for fancy.

BERSWAX .- Steady at 28@300 9 1 quality. Supply good. HONEY .- Market dull: new quoted at 15@ lee for choice comb and 708c for extracted.

MAPLE SYRUP.—Quoted at \$1@1 25 \$ gal-DRIED APPLES .- Quoted at 707% o fo

evaporated, and 6%c for sun dried. SALT.-Michigan, 80c per bbl. in car lots. or 85c in 10-bbl. lots; dairy, \$1 80@2 10 per bbl.; Ashton quarter sacks, 72c.

BALED HAY AND STRAW .- Market quiet Timothy quoted at \$14@14 50 for No. 1 and \$12 for No. 2; mixed, \$828 50 W ton. Clover. \$11@12. Straw, \$7. These prices are for car

BEANS.-Nothing doing. Quoted at \$2 45 22 50 9 bu. for city picked mediums. POTATOES .- Market weak, with Ohio sel ing at \$1 50@1 75 and Tennessee at \$2 \$ bbl. HIDES.—Green city, 4@4%0 \$ b., country, 5%@6c; cured, 8c; green calf, 4%@5c; salted do, 626%c;sheep-skins, 5002\$125 each; bulls

tag and grubby hides % off. APPLES.—Quoted at \$1 5003 \$ bbl. for good to oboice. Market crowded with inferior fruit which is slow of sale.

PEARS.—The market is fairly active, stocks being ample. Bartletts brought \$820 8 bbl.

PEACHES.—Business very slow, due to arge stocks and the poor quality of the fruit. Michigan nominal at \$1 50@3 00 % bu., and 25 @40 W peck basket.

PLUMS .- Damsons were plentiful at \$22 50 per bu RASPBERRIES.—Both varieties were carce yesterday while the inquiry was good The range was \$323 50 \$ bu. for either rec or black.

BLACKBERRIES.-Scarce, and quoted a

GRAPES.-Receipts yesterday were free but they were pretty much all in poor condition. Choice stock quoted nominal at \$8 000 10 W stand (100 hs.) or 8@100 W h., outside for Concords, Most of the sales were at re duced figures on account of condition.

HUCKLEBERRIES .- The market was poor y supplied. There was an active inquiry, and sales were made at \$3@3 50 per tu. as to qual-

EARLY VEGETABLES .- Dealers are selling at the following range of prices: Tomatoes 75@85c 🕏 🧏 bu. for common and \$2 bu. for Acmes. Cucumbers, 18@20c \$ doz. Radishes, 25c 🔋 doz. bunches. Onions, 20c 🖫 doz. bunches. String beans, 650 P bu. Wax beans, 75@85 \$ bu. Cabbages, \$1@1 05 \$ bbl. Green peas, 35c per bu. Celery, 30@40c 🔻 doz. bunches. Corn, 8@10c W doz. WATERMELONS.—Quoted at \$18@25 ¥ 100.

POULTRY.-Live quoted as follows Roosters, 5c W D.; chickens, 828%c; turkeys, 10c; ducks, 708c; spring chicks, 10c; pigeons, 8 dozen, 25c. Both supply and demand fair. HOPS .- Quoted as follows: State nominal; New York, 15@18c P D.; Washington Territory, 13@15c; Bavarian, 23@27c; Bohemian,

ONIONS.-Steady, easy at the late decline, quoted at \$3@3 25 per barrel and \$1 10@1 15

per bu. Stocks large. NUTMEG MELONS-Sales were at \$3 50@ 50 per bbl and \$1@1 50 per crate, as to condition of stock. Market weak.

PROVISIONS .- All hog products are firm and generally higher, the high price of hogs compelling an advance. Pork and lard were ower yesterday in Chicago, but yet considerably higher than a week ago. The stock of lard in Chicago is large, and turns out to be badly adulterated. Quotations here are as follows:

Mess, new.... Family..... 8 % @ 8 % @ 12 % @ 10 % @ @ 8 % @ 0 Lard in kegs, W D. Hams, W D..... hoice bacon, W h Extra mess beef, new per bbl... HAY .- The following is a record of the

sales at the Michigan Avenue scales for the week up to Friday noon, with price per ton: Monday—24 loads: Nine at \$11 and 10; four t\$12; one at \$13 and \$10 50. 12; one at \$13 and \$10 bb.
uesday—24 loads: Nine at \$10; four at
three at \$12 and \$9; two at \$11 50; one at

\$14, \$12 50 and \$10 50. Wednesday-37 loads: Fourteen at \$10: ne at \$11; four at \$13; three at \$12 and \$9 50; nine at \$11; four at \$13; three at \$12 and \$9.50; two at \$9: one at \$11 50 and \$8.50. Thursday—33 loads: Twelve at \$10; ten at \$11; three at \$9: two at \$12 and \$8; one at \$10.75, \$10.50, \$9.50 and \$7. Friday—17 loads: Four at \$12; three at \$11 and \$10; two at \$13 and \$9; one at \$12 50

LIVE STOCK MARKETS.

King's Yards. Friday, Aug. 3, 1888. CATTLE.

The market opened up at these yards with 329 head of cattle on sale, a good portion of which were westerns. The quality of the native cattle offered averaged quite poor, here being but few good ones among the re ceipts. For anything in fair flesh buvers paid about last week's prices, but the bulk of the native cattle came into competition with the westerns, and the market was irregular and in most cases lower. Altogether the market was an unsatisfactory one for the drovers, and but few of them were any noney ahead when they came to settle up The following were the closing

QUOTATIONS: Fancy steers weighing 1,500 to 1,650 Fancy steers weighing 1,500 to 1,650 lbs... \$5 00@5 25 Extra graded steers, weighing 1,300 to 1,450 lbs... 4 50@4 75 Choice steers, fine, fat and we formed, 1,100 to 1,300 lbs... 4 20@4 40 Good steers, well fatted, weighing 950 to 1,100 lbs... 3 75@4 00 Good mixed butchers' stock—Fat cows, heifers and light steers. 3 25@3 75 Coarse mixed butchers' stock—Light thin cows, heifers, stags and bulls 2 40@2 60 Stockers. 2 50@2 75 Bulls... 2 25@3 75

Brooks sold McGee 60 mixed westerns as old Genther 4 fair butchers' steers av .015 lbs at \$3 50, and 4 to Hersch av 920 lb

at the same price. Culver sold Kraft 4 good butchers' steer av 1.010 lbs at \$3 75 and a mixed lot head of fair butchers' stock to Kamman as av 855 lbs at \$3 10. Pearson sold Reagan a mixed lot of 18 head of thin butchers' stock av 840 lbs at \$2 70 and

good shipping steer to Brooka weighing 370 lbs at \$4 50. ,370 los at \$4 ob.

McHugh sold Stonehouse a mixed lot of 28
lead of fair butchers' stock av 916 lbs at \$3.

McMullen sold Wreford & Beck 10 fair utchers' steers av 924 lbs at \$3 25 and 2 fair ws sv 1,200 lbs at \$3.

Page sold Marx a mixed lot of 9 head of thin butchers' stock av 743 lbs at \$2 50. Hope sold Burt Spencer 8 fair shipping steers av 1,180 lbs at \$4; 3 thin heifers av 742 ha at \$3 and a bull weighing 870 lbs at \$2.

av 966 lbs at \$3 50. Astley sold Sullivan & F 10 stockers av bs at 692 lbs at \$2 35. be at \$92 lbs at \$2 db.

Gleason sold J Wreford 3 fair butchers'
teers av 900 lbs at \$3 25.

Culver sold Kamman a mixed lot of 12 head

of thin butchers' stock av 778 lbs at \$2 60, and 3 fair butchers' steers to Hitter av \$60 lbs at \$3 25.

Shepard sold Kofski 6 fair butchers' steers av 93 lbs at \$3 50.

Sullivan & F sold Marshlok 5 mixed westerns av 640 lbs at \$2 70.

Miller sold Bussell a mixed lot of 10 head of

Miller sold Bussell a mixed lot of 10 head of fair butchers' stock av 839 lbs at \$3.
Judson sold Mointire a mixed lot of 5 head of fair butchers' stock av 776 lbs at \$2.75.
Gleason sold Denk a mixed lot of 16 head of thin butchers' stock av 681 lbs at \$2.55 and 4 av 650 lbs at \$2.60.
White sold H Boe a mixed lot of 6 head of fair butchers' stock av 756 lbs at \$2.90.
Purdy sold Voigt a mixed lot of 6 head of fair butchers' stock av 800 lbs at \$2.80.
C Roe sold Bussell a mixed lot of 16 head of fair butchers' stock av 800 lbs at \$2.80.
Tabor sold Loosemore a mixed lot of 10

Tabor sold Loosemore a mixed lot of 10 head of fair butchers' stock av 770 lbs at \$2 75 and 2 thin cows av 950 lbs at \$2 50.

Haley sold Marx a mixed lot of 10 head of good butchers' stock av 928 lbs at \$3 20 and 22 fair ones to Stonehouse av 792 lbs at \$2 30.
22 fair ones to Stonehouse av 792 lbs at \$2 30.
22 fair ones to Stonehouse av 792 lbs at \$2 30.
23 fair ones to Stonehouse av 792 lbs at \$2 50.
24 Wreford & Beck sold Cross 50 mixed west-

orns av 809 lbs at \$2 65. livan & F sold Brooka 28 mixed westerns Capwell sold Van Tuyl 9 stockers av 772 lbs

Shepard sold Kamman 5 thin cows av 1,085 lbs at \$2 40 and a buli weighing 910 lbs at \$2.

Wreford & Beck sold John Hobinson 27 n Robinson 27 mixed westerns av 813 ibs at \$2 65.
Purdy sold Wreford & Beck 4 fair butchers'
steers av 880 ibs at \$3 25 and 3 fair cows av

900 ibs at \$3.

McMullen sold Capils a mixed lot of 5 head of fair butchers' stock av 842 lbs at \$2.80 and 2 bulls av 1,015 lbs at \$2.25.

Craver sold Marx a mixed lot of 9 head ef fair butchers' stock av 870 lbs at \$3.75.

Gleason sold Stucker a mixed lot of 7 head of fair butchers' stock av 832 lbs at \$2.70 and a bull weighing 1,260 lbs at \$2.

Purdy sold Kellogy 17 stockers av 720 lbs at \$3.

Miller sold Reagan a mixed lot of 9 head of thin butchers' stock av 893 lbs at \$3 50.

Craver sold Brooka a mixed lot of 20 head of fair butchers stock av 868 lbs at \$2 75. White sold Kellogg 6 stockers av 800 lbs at

Wreford & Beck sold Phillips & Wreford 28 mixed westerns av 798 lbs at \$2 83.

The offerings of sheep numbered 2,021 head The quality of the receipts were not as good as those of one week ago, and for that reason no sales were made at as high prices. Taking this into consideration there was little if any change in the market.

Dunning sold Ellis 39 av 73 lbs at \$2 50. Judson sold Wreford & Beck 63 av 79 lbs at 3 35. Watson sold Fitzpatrick 17 av 73 lbs at

Whittaker sold Loosemore 61 av 69 lbs at Payne sold Loosemore 120 av 68 lbs at \$2 65. Farnam sold Clark 114 av 72 lbs at \$3 20.

Spicer sold Young 49 av 71 lbs at \$3.

Sprague sold Monahan 30 av 72 lbs at \$3 12\frac{1}{2}.

Holmes sold Clark 108 av 76 lbs at \$3 20.

Hill sold Wreford & Beck 54 av 77 lbs at \$2 50. Shepard sold Fitzpatrick 117, part lambs av

Ward sold Fitzpatrick 78 av 71 lbs at \$3. Pearson sold Fitzpatrick 43 av 74 lbs

Craver soid Morey 88, part lambs av 73 lbs at \$3 75. Longeor sold John Robinson 72 av 70 lbs at Huutley sold John Robinson 58, part lambs v 65 lbs at \$3 50. McMullen sold Morey 35 av 84 lbs at \$3 65.

The offerings of hogs numbered 1,891 head. The market for hogs opened up very active among the local trade and prices ranged fully 10 cents higher than those of last week There were more hogs offered than they required, and after they were supplied, the sales showed a decline of 10 cents from the prices of last week, and the close was weak. Peach sold R S Webb 18 av 146 lbs at \$6 10. C Roe sold R S Webb 71 av 202 lbs at \$6 50 and 82 to Webb Bros av 144 lbs at \$6 40.
Edmore sold Webb Bros 15 av 152 lbs at

Milispaugh sold R S Webb 19 av 193 lbs Welch sold R S Webb 10 av 225 lbs at \$6 25. Lyman sold Webb Bros 39 av 183 lbs at

Standlick sold R S Webb 38 av 140 lbs at \$6. Harger sold Webb Bros 42 av 232 lbs at Jones sold Webb Bros 23 av 158 lbs at

Purdy sold Webb Bros 10 av 175 lbs at \$6 25. Glddings sold Webb Bros 49 av 200 lbs at Parks sold Webb Bros 56 av 202 lbs at \$6 40 Gleason sold Webb Bros 35 av 216 lbs at Harris sold Webb Bros 43 av 210 lbs at

Watson sold Webb Bros 54 av 164 lbs at \$6. Bunnell sold Sullivan & F 49 av 151 lb Whittaker sold Sullivan & F 49 av 171 lbs

Gleason sold R S Webb 12 av 171 lbs at \$5 90. Bordine sold Sullivan & F 85 av 157 lbs at \$6. Micol sold Sullivan & F 32 av 202 lbs at \$6. Culver sold Rauss 9 av 233 lbs at \$6 40. O'Hrra sold Suilivan & F 53 av 173 lbs at \$6 Ford sold Rauss 27 av 199 lbs at \$6.25. Astley sold R S Webb 23 av 159 lbs at \$6. McMullen sold Sullivan & F 44 av 188 lbs

Huntley sold Sullivan & F 25 av 175 16s as \$6 20. Shepard sold Webb Bros 58 av 170 lbs at \$6 10.

C Roe sold R S Webb 15 av 242 lbs at \$6 25. Capwell sold Webb Bros 61 av 183 lbs at

Sprague sold RS Webb 52 av 184 ibs at \$6. D Sullivan sold Sullivan & F 31 av 138 lbs Pinkney sold Webb Bros 17 av 135 lbs at

Purdy sold Webb Bros 67 av 177 lbs at \$6 20.

Scammell sold Sullivan & F 33 av 262 lbs Webber sold Sullivan & F 106 av 159 ibs at Farnam sold Sullivan & F 17 av 178 lbs at Ward sold Sullivan & F21 av 202 lbs at \$5 90

Longeor sold Sullivan & F 33 av 194 lbs at \$6

At the Michigan Central Yards. Friday, Aug. 3, 1888.

As for the two past weeks the cattle and sheep received at these yards, they were either consigned to Buffalo or for local butchers direct. This week there were three lots of hogs changed hands as follows:

McMullen sold Sullivan & F 32 av 132 lbs at Lee sold Suilivan & F 133 av 163 lbs at \$6 and 67 av 181 lbs at \$6 25.

Buffalo.

CATTLE.-Receipts 12,138 against 13,284 the revious week. The market opened up on Monday with 220 car loads on sale. There were but few good cattle on saie, and they were in active demand at prices fully as high as those of the Monday previous. The diference in prices between good cattle and ommon ones was never greater in Buffalo then at the present time, and this week the margin was larger than ever. Good 1,400 to to 1,500 lb steers were quoted at \$5 75@6; good ,300 to 1,400 lbs do, \$5@5 65; good 1,200 to 1.300 lbs do. \$4 50@5 25; common to fair 1.100 to 1,200 lbs do, \$4 25@4 60, and common to fair 1,000 to 1,100 lbs do, \$3 75@4 25. About 12 loads of Cherokee steers weighing from 900 to 1,000 lbs brought \$3 25@3 60. Good to choice mixed butchers and cows and heifers in fair demand at \$363 50; inferior do, \$2 50 @2 75 and dull. There was a little improve ment in the demand for stockers and feeders and prices were a shade firmer, but they are still quotable within the range of \$2 75@3 25. Fat bulls in fair demand at \$2 75@3 25; stock was very little inquiry, but the feeling was considered steady. On Friday there were 400 cattle on sale. The demand was active and

QUOTATIONS: 4 00204 50 quality.

Butchers' Stock—Inferior to common steers and heifers, for city slaughter, weighing 900 to 1,000 lbs.

Michigan stock cattle, common to choice. choice..... Michigan feeders, fair to choice..... Fat bulls, fair to extra..... SHEEF.—Receipts 33,400, against 37,800 the previous week. There were 45 car loads of sheep on sale Monday. The demand for good

sneep on sale and they are the definition of the choice sheep was active at an advance of 10 cents over the prices of Saturday, other grades firm. Co.L.mon to fair sheep sold at \$3.50@4; good to choice, \$4.25@4.50; passably extra, \$4.75. The offerings of lambs were the choice of th extra, \$4 75. The offerings of lambs were larger and the market ruled slow; inferior to fair western, \$4@5; good to choice, \$5 25@6. There were seven loads on sale Tuesday and the market was firm. The receipts on Wednesday and Thursday was light and the market was light and the market unchanged. On Friday there were 10 loads of sheep on sale. The market was slow but prices were unchanged. Common to fair sold at \$3 50@4; good to choice, \$4 25@4 50; lambs, \$4 50@6.

Hoos.—Receipts 40,230, against 39,131 the previous week. The offerings of hogs on Monday consisted of 43 car loads. The market opened up active at an advance of 5

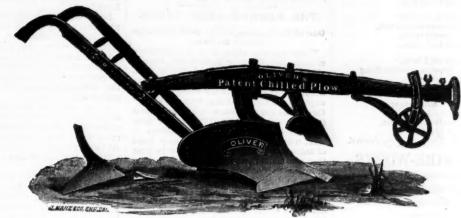
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FOURTEENTH—There are over 1,100,000 Oliver Chilled Plows in actual use, and three times as many being sold at the present

time as any other plow manufactured. It is warranted to do better work and more of it with the same amount of draft han any other plow in use. FIFTEENTH—Finally, these plows are better known, have reached a larger sale, have had a longer run, have proved more popular and given better satisfaction than any other plows on the face of the globe.

nts over the prices of Saturday, but was a tle weak at the close. Good to choice orkers sold at \$6 60@6 70; fair do, \$6 40@ 50; selected medium weignts, \$6 7026 75; ough ends, \$5 5025 75. There was only one oad on sale Tuesday and \$9 loads on Wednesday. The demand was fair and prices steady. The receipts were light on Thursday and prices were firm. On Friday the offerings numbered 3,500. The demand was good and for medium weights prices were 5 cents higher, other grades strong. Good to choice Yorkers sold at \$6 60@6 70; fair do, \$6 40@ 50; selected medium weights, \$6 75@6 80.

CATTLE .- Receipts, 47,283 against 40,082 ast week. Shipments 11,985. The market opened up on Monday with 9,533 head of cat ile on sale, about half of which were Texans All desirable grades of cattle sold at full former prices, but common stock declined 10 ents. Only half a dozed loads were good nough to bring over \$5 65. Dressed-bee men bought native cattle at \$3 65@5 75 and shippers and exporters at \$3.75@6. Most of the natives sold below \$5 owing to the poorness of the quality. Coarse 1,280 lb "grassrs" sold at \$3 65, while the native \$3 only averaged 1.378 ibs. Most of the native cows sold at \$2 20@2 60. Texas cattle sold at \$1 85@3 65, principally at \$2 70@3 30. Indian cattle sold at \$3 75@4. Stockers and feeders sold quite freely, but prices were weaker, with sales at \$2 20@3 60. For poor to fair native steers on Tuesday prices were 10 cents lower, and Texans declined 10@15 cents, other grades unchanged. On Wednesday best natives were 5@10 cents higher, and on Thursday ruled steady at the advance On Friday the receipts numbered 1,000 head. The demand was fair and the market un

changed. The following were the closing Fancy bred beeves. Good to choice 1,300 to 1,550 lbs... Medium to good ,1,100 to 1,250 ... Common to choice cows, 850 to 1,900

Common to choice cows, 850 to 1,100

Distillery-fed steers.

Common to choice cows, 850 to 1,100

Distillery-fed steers. 4 10@5 60 2 80**@**3 25

Hoos.—Receipts 60,804 against 52,609 last week. Shipments 30,528. The receipts of hogs on Monday numbered 15,339. The market opened up excited and 10@15 cents higher than or. Saturday, remaining steady at the advance until the close. Poor to prime light sold at \$8 20% 75; inferior mixed to choice heavy, \$6 10% 70; skips and culls, \$4 540%. The receipts were light or Tuesday. \$4 50@6. The receipts were light on Tuesday but the demand was not urgent and the mar-ket ruled about steady. The demand was fairly active on Wednesday, but prices were 5 cents lower, and on Thursday ruled stead; for best but weak for common lots. Of Friday the receipts numbered 14,000. The narket was slow and prices 10 cents lower. Poor to prime light sold at \$6 15@6 60; inferio mixed to choice heavy, \$5 90@6 60; skips and oulis, \$4 40@5 80.



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